

## **Eleventh Month Warranty Maintenance Inspection Report**

### **HAZARDOUS MINE OPENING PROJECT; PHASE 25, PROJECT 28**

**DSL-AMRB 90-022**

**Austin and Marysville Mining Districts**

**Lewis and Clark County, Montana**

**September 1992**



**Chen  Northern, Inc.**  
**Helena, Montana**

September 28, 1992

Mr. Joel Chavez  
Montana Department of State Lands  
Abandoned Mine Reclamation Bureau  
Capitol Station  
Helena, MT 59620

**RECEIVED**  
**SEP 28 1992**  
**STATE LANDS**

RE: Eleventh Month Warranty/Maintenance Inspection; Phase 25, Project 28

Dear Joel:

An eleventh month warranty and maintenance inspection for Phase 25, Project 28 was conducted during August, 1992 to identify any construction deficiencies attributable to contractor negligence and verify sites requiring maintenance. A visual inspection of contracted reclamation was performed at approximately 105 mine openings at 58 sites in the Austin and Marysville Mining Districts of Lewis and Clark County. In addition, revegetation efforts were evaluated for the introduction of noxious weeds. Color photographs were taken of each installed closure and backfill to document site conditions. Hazard maps showing site locations and the photographic record are included as Appendix A and B respectively to this letter report.

### Inspection Description

In preparation for the inspection a data base was utilized to generate an inventory of all sites on an as-constructed basis. The inventory incorporated all changes and additions to the project. Backfill and blast sites were evaluated for subsidence or sloughing. Where constructed closures or fencing was installed, the status of the closure (i.e. good condition, vandalized, damaged/natural causes, destroyed by mining, and needs warranty repair) was noted. The need for maintenance was assessed and the responsible party identified according to the following: Contractor-for warranty work such as incorrectly installed culvert hatches, unpainted steel grate or adit gate sections, or any work not performed in compliance with the contract documents; AMRB-for weed control and additional backfill where subsidence had occurred; and Landowner-for all remaining damage done to constructed closures by natural or human means. The success of revegetation efforts were evaluated and reported in a column for general remarks and comments.

### Inspection Results

Reclamation work inspected for warranty repair was judged to be acceptable at all sites. The following table summarizes the results of the field inspection and identifies sites where continued monitoring is recommended.

STATE DOCUMENTS COLLECTION

SEP 28 1992

MONTANA STATE LIBRARY  
1515 E 6th AVE.  
HELENA, MONTANA 59620

**INSPECTION SUMMARY**  
**PHASE 25, PROJECT 28 MONITORING/MAINTENANCE SITES**

PA #	DISTRICT	SITE	NO.	RESPONSIBLE PARTY	CONDITION DESCRIPTION & RECOMMENDATIONS
25-219	Austin	SE SW Sec. 27	7-17	AMRB	Noxious weeds.
25-060	Marysville	Allegheny	2-2	--	Need hazard signs installed.
25-076	Marysville	Drumlummon	10-19	AMRB	Noxious weeds.
25-077	Marysville	Earthquake	40-36	--	Minor subsidence. Monitor site for further settlement.
25-015	Marysville	Empire	12-43	Landowner	Mine timbers have been vandalized and access gained around adit gate.
25-182	Marysville	Larson	19-50	--	Bullet holes in hazard sign.
25-080	Marysville	North Star	3-21	AMRB	Noxious weeds.
25-170	Marysville	NW NE Sec. 27	22-53	Landowner	Portal timbers have been vandalized and access gained from above and behind adit gate.
25-135	Marysville	Robert Emmet	25-63	--	Need hazard signs installed.
25-181	Marysville	Strawberry	17-93	--	Minor subsidence. Monitor site for further settlement.





Mr. Joel Chavez  
September 28, 1992  
Page 3 of 3

Two incidents of vandalism occurred in the Marysville District. At the Empire site # 12-43 mine timbers and shoring have been removed and access gained around the adit gate. The NW NE Section 27 site # 22-53 adit has been accessed by removing earth and timbers from above and behind the steel gate. In addition, one "Hazard" sign at the Larson site # 19-50 was observed to contain bullet holes.

Noxious weeds were observed at several sites throughout the project area. It should be noted that "knapweed" and "thistle" infestations are common in the area and not necessarily attributable to construction operations. Numerous sites are located in areas currently being grazed. One landowner and BLM lessee (Mr. Dave Wood) expressed concern over the presence of noxious weeds at the Austin District SE SW Section 27 site # 7-17. As per the approved weed control plan filed with Lewis and Clark County, monitoring of revegetation efforts and weed control is the responsibility of the AMRB and will continue for a two year period following reclamation construction.

#### Recommendations

It is our recommendation that the landowners of the two vandalized adits be informed of current site conditions and be encouraged to repair the closures themselves. However, the AMRB may wish to consider including these sites in a future maintenance construction project. In either case we recommend that construction and installation techniques for steel gate adit doors be carefully reviewed on a site-by-site basis.

Should you have any questions or comments regarding this report, please feel free to contact us. We look forward to further assignments from the AMRB.

Sincerely,



Joe Murphy  
Reclamation Specialist  
91-3220A



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**HAZARDOUS MINE OPENING  
PHASE 25, PROJECT 28  
AUSTIN MINING DISTRICT**

PA #	SITE NAME	NO.	CLOSURE	CONDITION	PHOTO NO.	COMMENTS
25-221	Dreadnaught	7-16	Fence	Good	A-1	
25-033	East NW Sec. 5	8-5	Backfill	Good	A-2	Excellent vegetation.
		8-6	Backfill	Good	A-3	Poor vegetation.
		8-7	24' x 24' Grate	Good	A-4	Good vegetation.
25-220	Jeff Davis Gulch	7-16	24' x 24' Grate	Good	A-5	
25-185	King Tut	4-9	Backfill	Good	A-6	Fair vegetation.
		4-10	Backfill	Good	A-7	Poor vegetation.
		4-10	Backfill	Good	A-8	Excellent vegetation.
25-380	Limestone Ridge	8-4	Backfill	Good	A-9	Good vegetation.
25-379	Little Valley	8-3	Backfill	Good	A-10	Good vegetation.
25-222	NE SE Sec. 16	5-13	Backfill	Good	A-11	Fair vegetation.
25-216	SE NE Sec. 3	6-14	Backfill	Good	A-12	Fair vegetation.
25-219	SE SW Sec. 27	7-17	16' x 16' Grate	Good	A-13	Fair vegetation. Adjoining landowner expressed concern over presence of noxious weeds (thistles).
25-224	Sitzer Gulch	9-21	Backfill	Good	A-14	No vegetation. Area being grazed.
		9-22	16' x 24' Grate	Good	A-15	Fair vegetation. Area being grazed.
		9-23	Fence	Good	A-16	
		9-24	Backfill	Good	A-17	Fair vegetation. Area being grazed.
25-378	Scratch Gravel	11-12	24' x 24' Grate	Good	A-18	Good vegetation.
25-215	Spring Gulch	10-25	Backfill	Good	A-19	Poor vegetation.
		10-26	Backfill	Good	A-20	Poor vegetation.
		10-27	Backfill	Good	A-21	Poor vegetation.





**HAZARDOUS MINE OPENING  
PHASE 25, PROJECT 28  
MARYSVILLE MINING DISTRICT**

PA #	SITE NAME	NO.	CLOSURE	CONDITION	PHOTO NO.	COMMENTS
25-184	Albion	1-1	Sign	Good	M-1	
25-060	Allegheny	2-2	Del. Posts	Good	M-2	Need hazard signs installed.
25-062	Ample/Hickey	8-3	32'x 36' Grate	Good	M-3	
		8-4	Fence	Good	M-4	
25-116	Big Ox	5-11	Culvert	Good	M-5	No vegetation.
		5-12	16' x 24' Grate	Good	M-62	
		5-13	Cable Net	Good	M-6	
		5-14	Culvert	Good	M-7	No vegetation.
25-127	Black Douglas	7-15	Fence	Good	M-8	
25-120	Blackhawk/Janette	33-16	Backfill	Good	M-9	Excellent vegetation
		33-17	Backfill	Good	M-10	Fair vegetation with some weeds. Currently being grazed
		33-97	Backfill	Good	M-11	Poor vegetation with weeds. Currently being grazed
		33-98	Backfill	Good	M-12	Good vegetation.
25-076	Drumlummon	10-19	16' x 16' Grate	Good	M-13	Excellent vegetation. Some knapweed in area
		10-20	8' x 16' Grate	Good	M-14	Excellent vegetation.
		10-26 10-27 10-28	Fence	Good	M-15	
		10-29 10-31	Fence	Good	M-16	
		10-30	Fence	Good	M-17	
		10-32	Sign	Good	M-18	
		10-33	Sign	Good	M-19	
25-118	E.F.L.	39-35	4' Culvert	Good	M-20	Excellent vegetation.



**HAZARDOUS MINE OPENING  
PHASE 25, PROJECT 28  
MARYSVILLE MINING DISTRICT**

PA #	SITE NAME	NO.	CLOSURE	CONDITION	PHOTO NO.	COMMENTS
25-077	Earthquake	40-36	Backfill	Minor Sub.	M-21	Monitor subsidence. No vegetation as site is in roadway.
25-078	Emma Miller	11-37	Fence	Good	M-22	
25-015	Empire	12-38	Adit Gate	Good	M-23	
		12-43	Adit Gate	Vandalized	M-24	Mine timbers have been vandalized and access gained around adit gate.
25-173	Erie	13-39	Backfill	Good	M-25	No vegetation. Site backfilled with rock.
		13-40	Backfill	Good	M-26	No vegetation. Site backfilled with rock.
		13-41	Backfill	Good	M-27	No vegetation. Site backfilled with rock.
25-134	Fraction	20-42	Fence	Good	M-28	
25-132	Frame	24-63	3' Culvert	Good	M-29	Excellent vegetation.
		24-64	4' Culvert	Good	M-30	Good vegetation.
25-126	Genesee	14-44	Fence	Good	M-31	
		14-45	Fence	Good	M-32 & 33	
		14-46	Fence	Good	M-34	
25-130	Griff	15-47	Fence	Good	M-35	
25-125	Kenawa	18-48	Fence	Good	M-36	
		18-49	24' x 24' Grate	Good	M-37	Fair vegetation.
25-182	Larson	19-50	Fence	Good	M-38	Bullet holes in hazard sign.
25-315	Last Hope	41-51	3' Culvert	Good	M-39	Good vegetation.
25-177	Little Giant	21-52	Fence	Good	M-40	
25-170	NW NE Sec. 27	22-53	Adit Gate	Vandalized	M-41	Mine timbers have been removed and access gained from above and behind adit door.
		22-56	3' Culvert	Good	M-42	Fair vegetation with some weeds.
25-312	NW NW Sec. 11	44-58	Fence	Good	M-43	





**HAZARDOUS MINE OPENING  
PHASE 25, PROJECT 28  
MARYSVILLE MINING DISTRICT**

PA #	SITE NAME	NO.	CLOSURE	CONDITION	PHOTO NO.	COMMENTS
25-138	Nine Hour	16-59 16-60	Fence	Good	M-44	
25-080	North Star	3-21	Backfill	Good	M-45	Good vegetation. Some knapweed in area.
		3-22	Backfill	Good	M-46	Excellent vegetation.
		3-23	Backfill	Good	M-47	Excellent vegetation.
		3-24	Backfill	Good	M-48	Excellent vegetation.
		3-25	Fence	Good	M-49	
25-318	Old Empire	23-61	Backfill	Good	M-50	Excellent vegetation.
		23-62	Backfill	Good	M-51	Excellent vegetation.
25-350	Point Hope	35-34	3' Culvert	Good	M-52	Excellent vegetation.
25-135	Robert Emmet	25-63	Fence	Good	M-53	Needs hazard signs installed.
		25-64	3' Culvert	Good	M-54	Excellent vegetation.
		25-65	Culvert	Good	M-55	Excellent vegetation.
25-121	Rose Bud	26-66	Backfill	Good	M-56	Good vegetation. Currently being grazed.
25-311	SE NE Sec.10	45-68	Fence	Good	M-57	
		45-69	Blast	Good	M-58	No vegetation.
		45-70	Fence	Good	M-59	
		45-71	Blast	Good	None	No vegetation. Site located in solid rock.
		45-72	10' x 10' Grate	Good	M-60	
25-341	SE NE Sec. 27	47-73	3' Culvert	Good	M-61	Sparse vegetation.
25-310	SE SE Sec. 29	47-74	Blast	Good	M-63	Fair vegetation.
		42-75	Blast	Good	M-64	Poor vegetation.
25-178	SE SW Sec. 33	27-76	Backfill	Good	M-65	Good vegetation.



**HAZARDOUS MINE OPENING  
PHASE 25, PROJECT 28  
MARYSVILLE MINING DISTRICT**

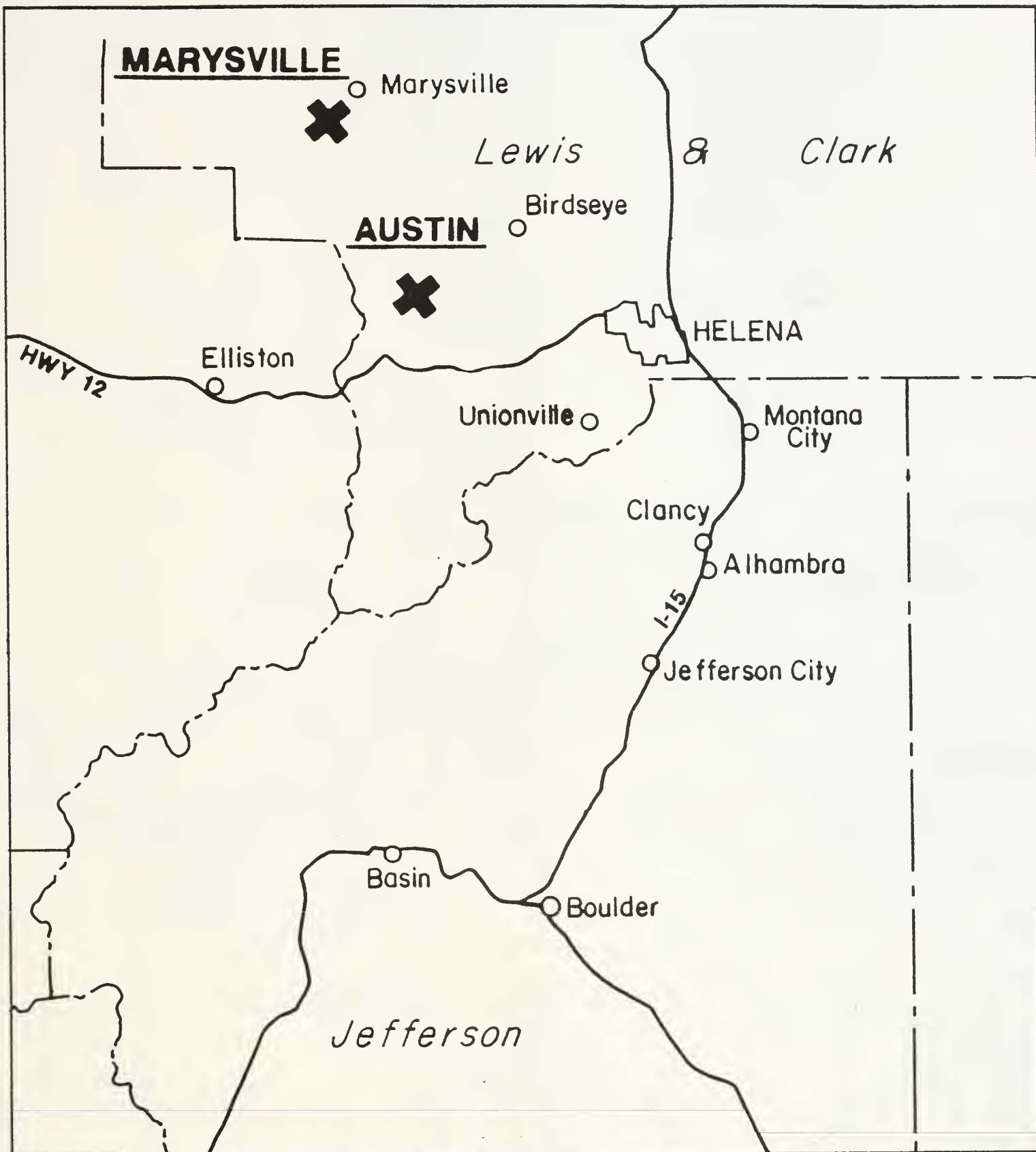
PA #	SITE NAME	NO.	CLOSURE	CONDITION	PHOTO NO.	COMMENTS
25-133	SE SW Sec. 36	28-77	Backfill	Good	M-66	Excellent vegetation.
		28-78	Backfill	Good	M-67	Excellent vegetation.
25-086	Shannon	30-96	Backfill	Good	M-68	Excellent vegetation.
25-119	SW NE Sec. 31	29-79	Fence	Good	M-69	
25-313	SW SW Sec. 10	46-80	Fence	Good	M-70	
25-114	SW SW Sec. 30	43-81	Cable Net	Good	M-71	
25-128	Snow Bird	34-83	24' x 32' Grate	Good	M-72	Excellent vegetation.
25-181	Strawberry	17-92	Backfill	Good	M-73	Excellent vegetation.
		17-93	Blast	Minor Sub.	M-74	Excellent vegetation. Monitor subsidence.
		17-94	Backfill	Good	M-75	Excellent vegetation.
		17-95	Backfill	Good	M-76	Excellent vegetation.
		17-99	Backfill	Good	M-77	Excellent vegetation.
25-166	Tyson	36-85	Fence	Good	M-78	
25-082	Vestal	37-86	Fence	Good	M-73	
25-174	Whippervill	38-87 38-88	Fence	Good	M-80	
25-340	Z-G # 18	46-89	Fence	Good	M-81	
		48-90	Culvert	Good	M-82	Fair vegetation.
		48-90	Blast	Subsidence	M-83	Adit has sloughed open. Hazard not considered dangerous.
		48-67	Fence	Good	M-84	





**APPENDIX A**  
**HAZARD MAPS**



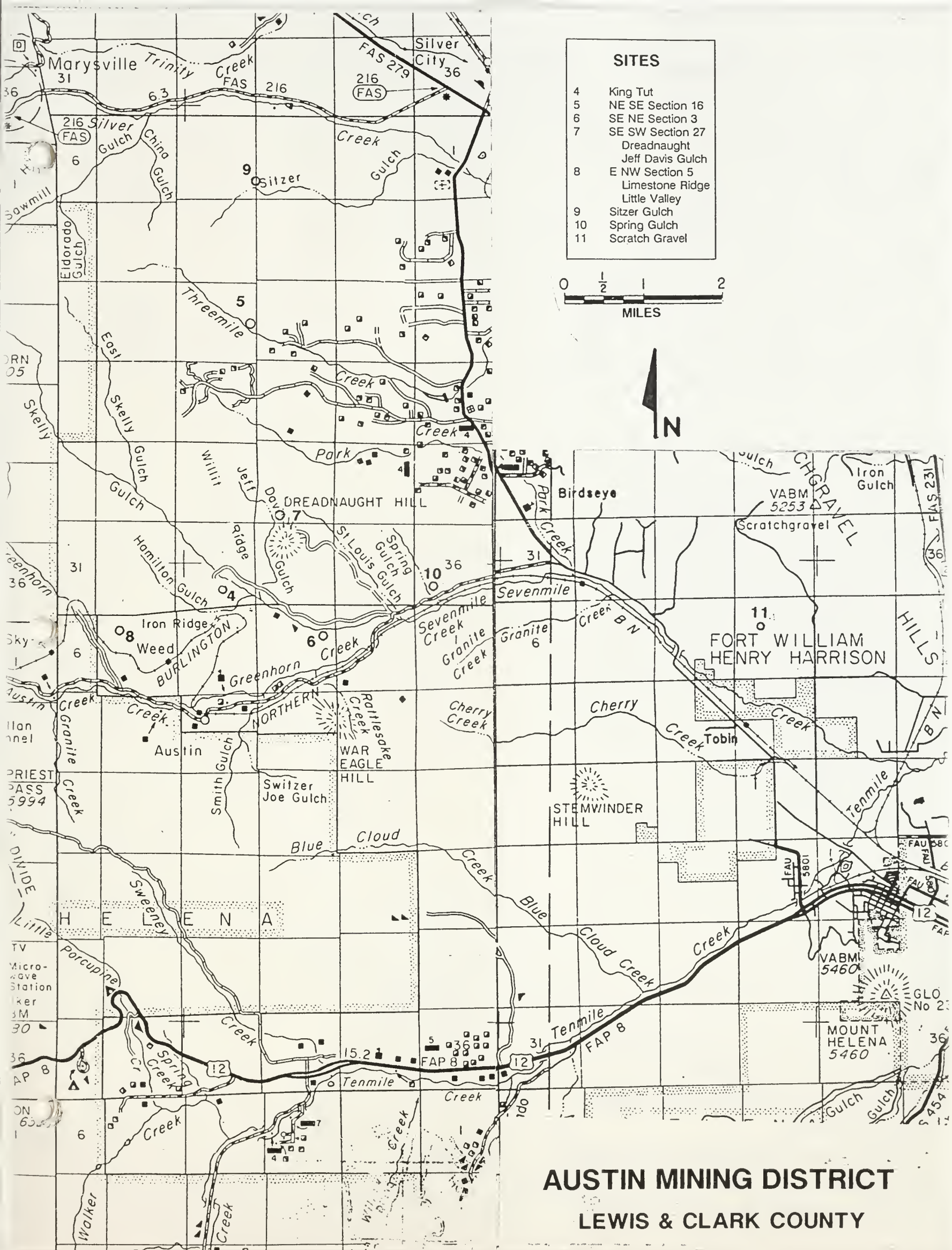


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## HAZARDOUS MINE OPENING PROJECT 28

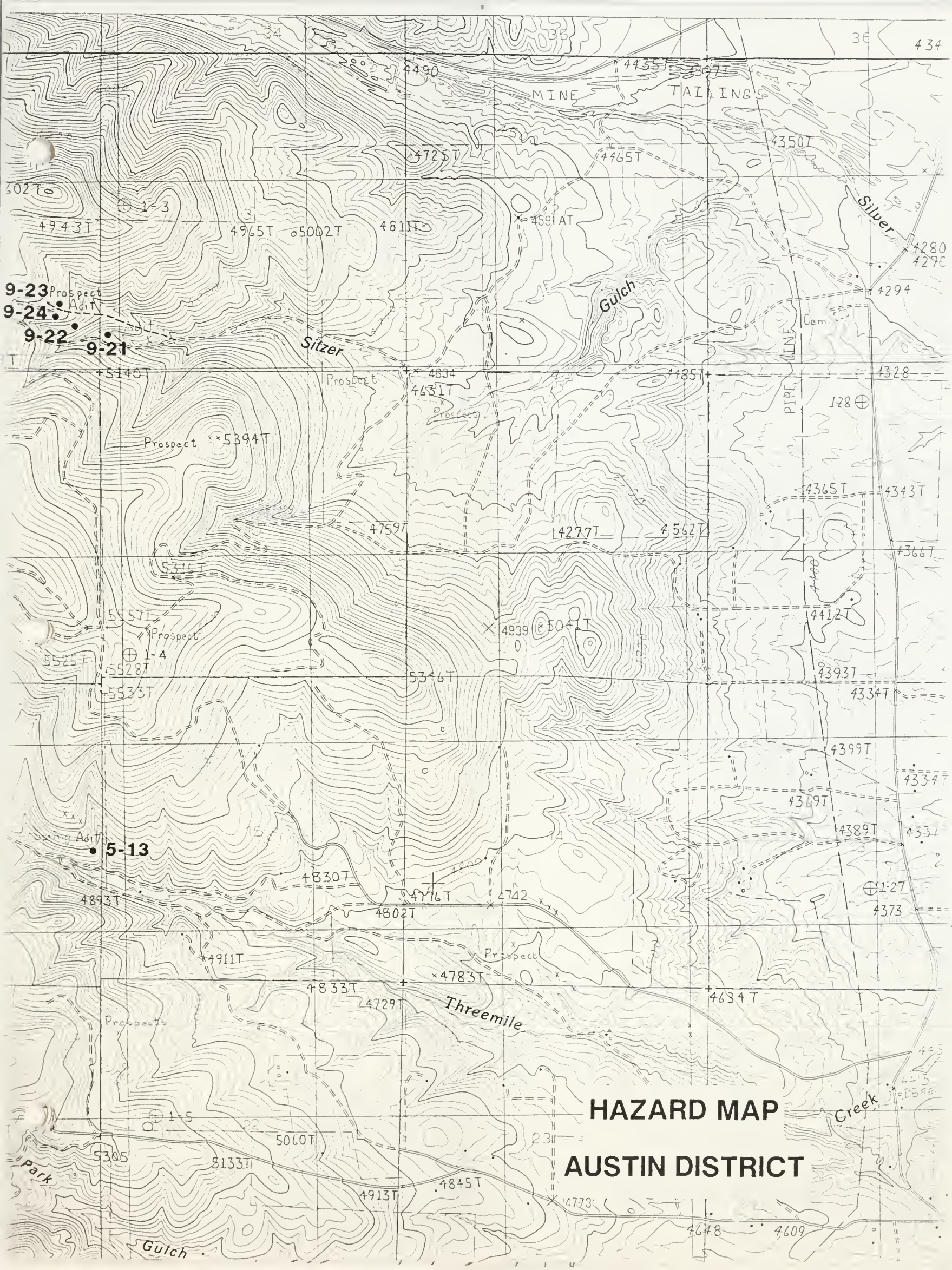








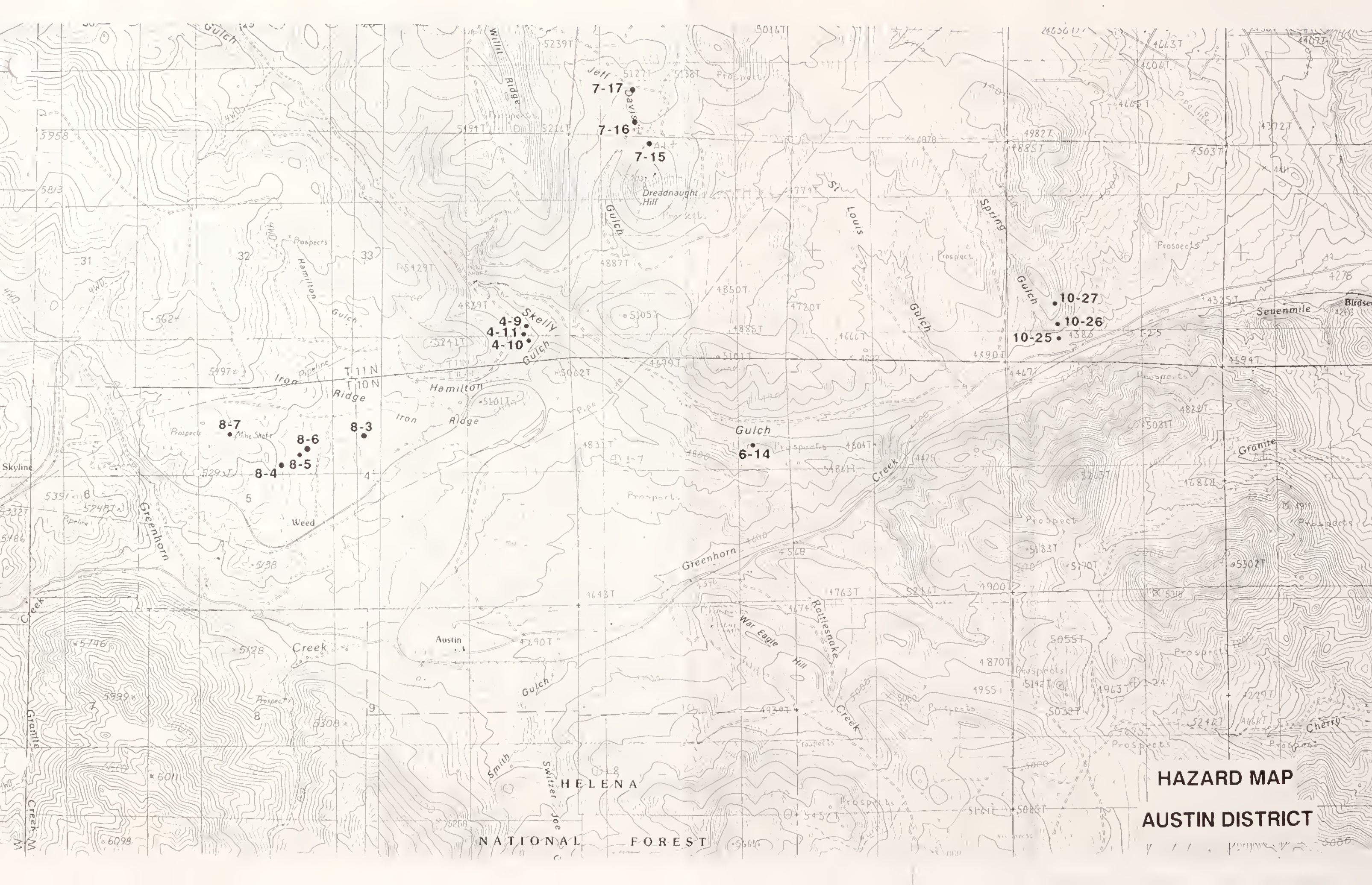










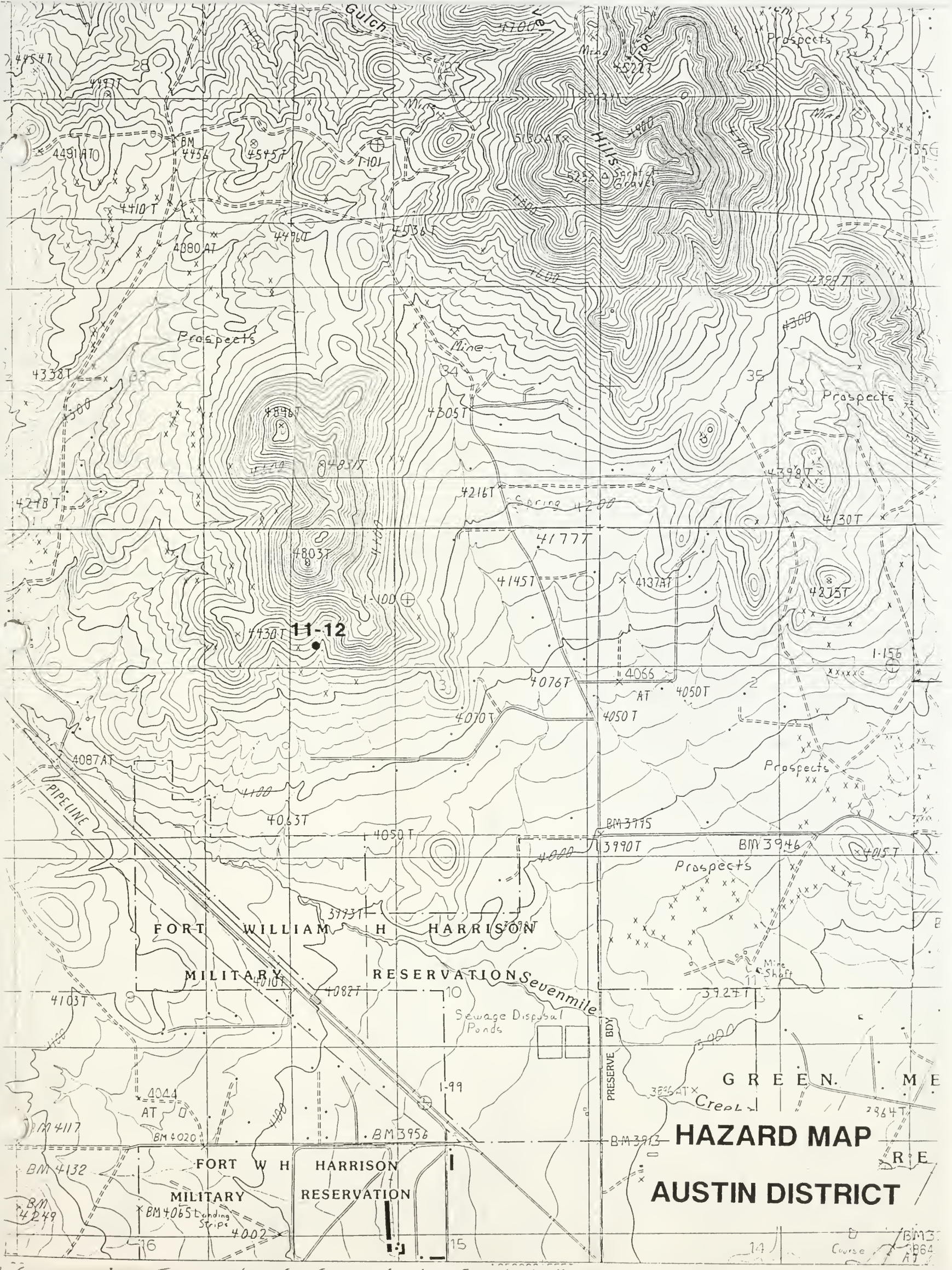


HAZARD MAP

AUSTIN DISTRICT





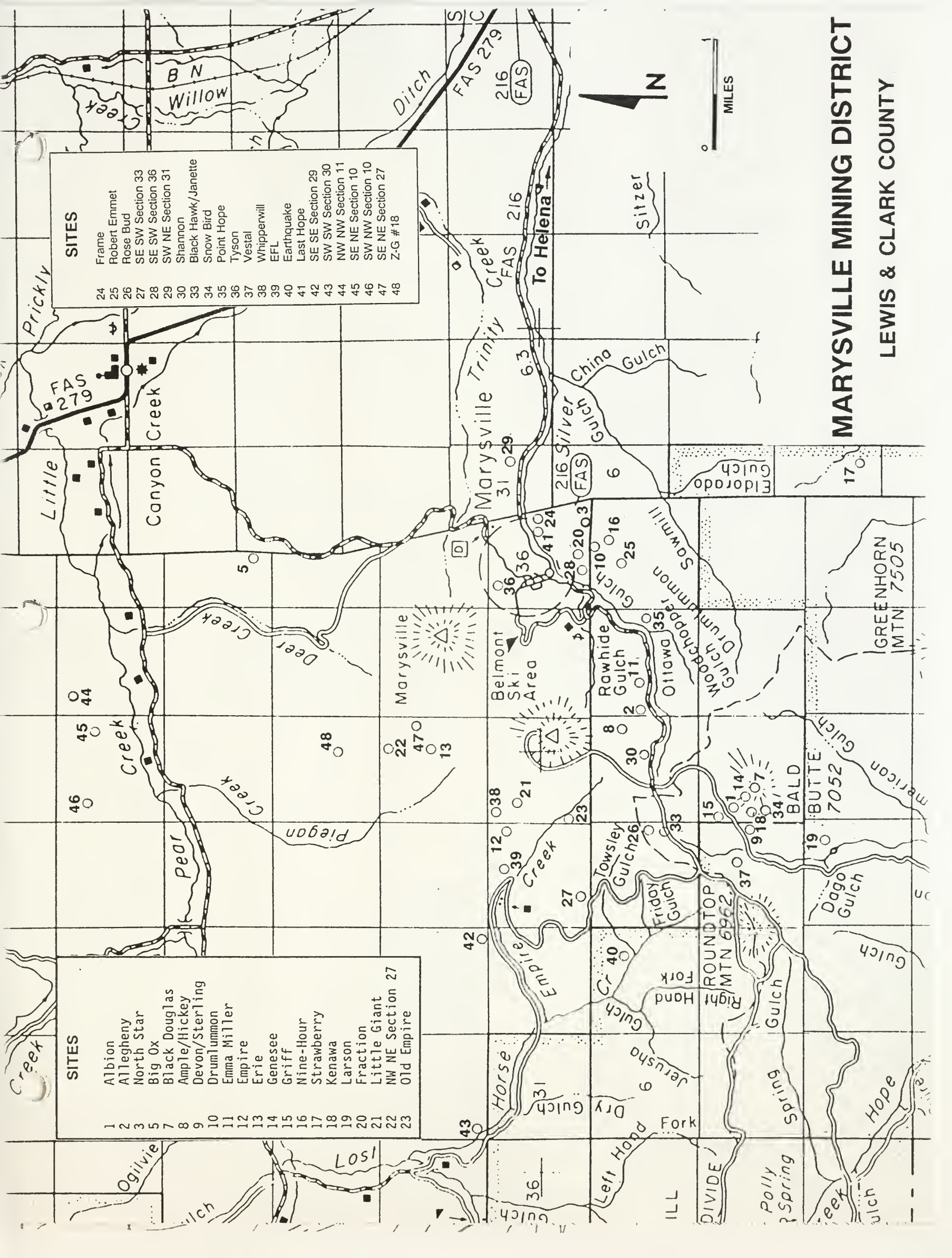


**HAZARD MAP**  
**AUSTIN DISTRICT**

BM 3964  
A 7







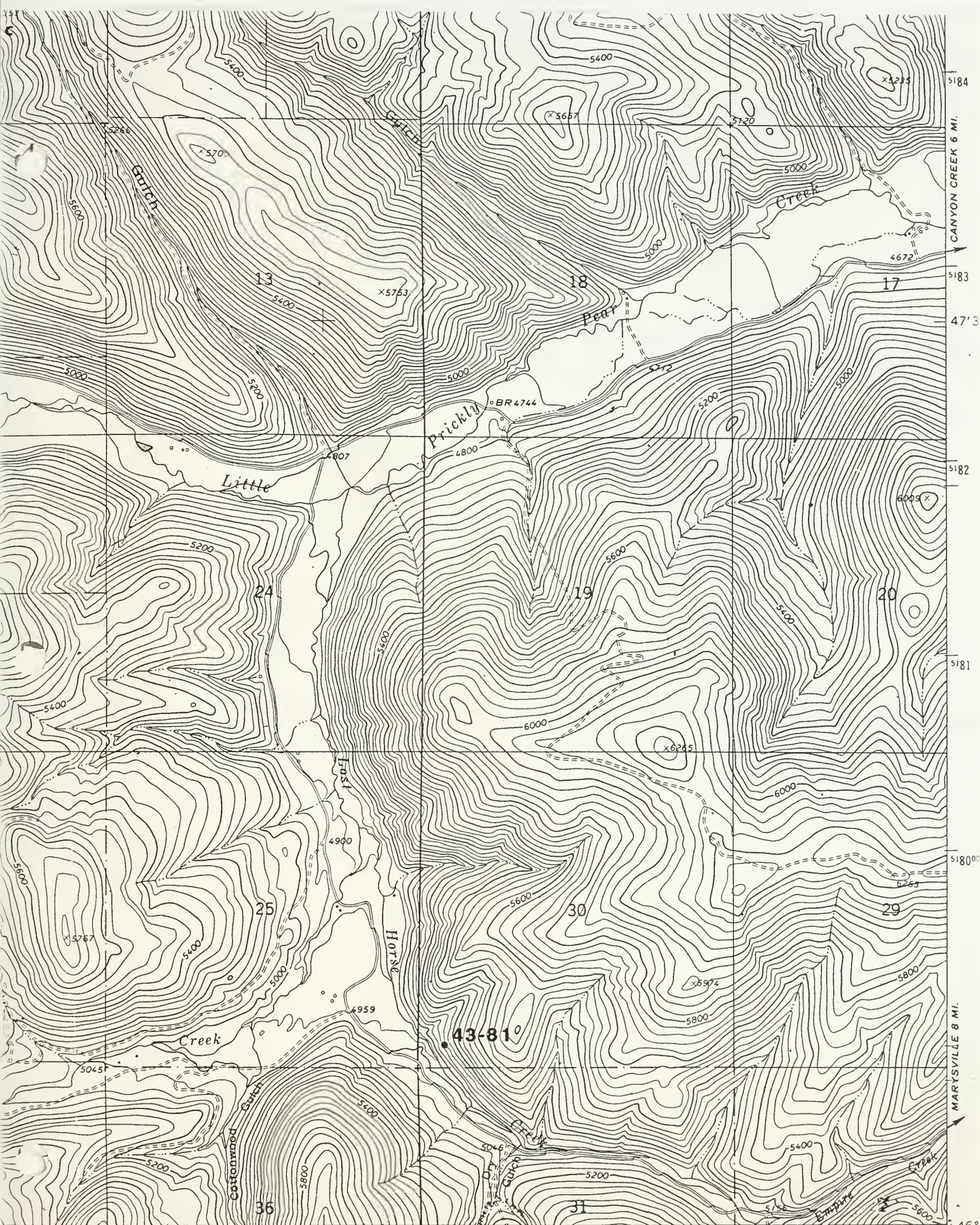




# HAZARD MAP







**HAZARD MAP**  
**MARYSVILLE DISTRICT**











**APPENDIX B**  
**PHOTOGRAPHIC RECORD**







HMO Project/Ph28 Warranty  
Austin/Dreadnaught 7-15  
50' N. of site

A-1



HMO Project/Ph28 Warranty  
Austin/E NW Sec.5 8-7  
15' N. of site

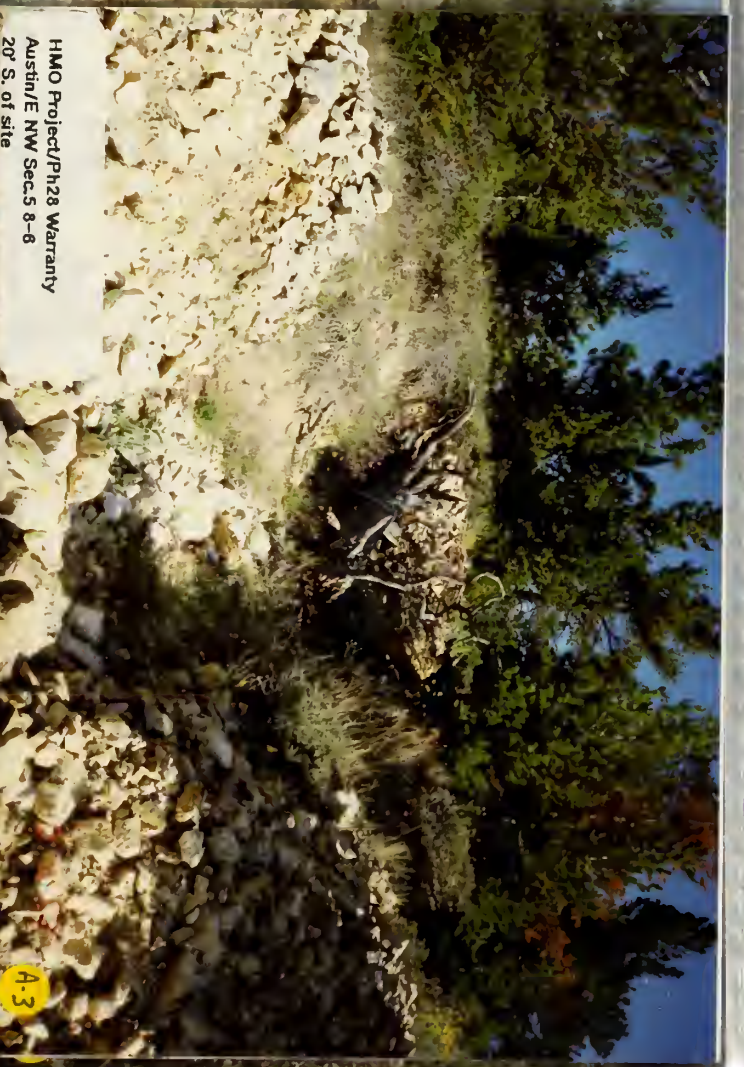
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A-3



HMO Project/Ph28 Warranty  
Austin/E NW Sec. 5 8-5  
20' N. of site

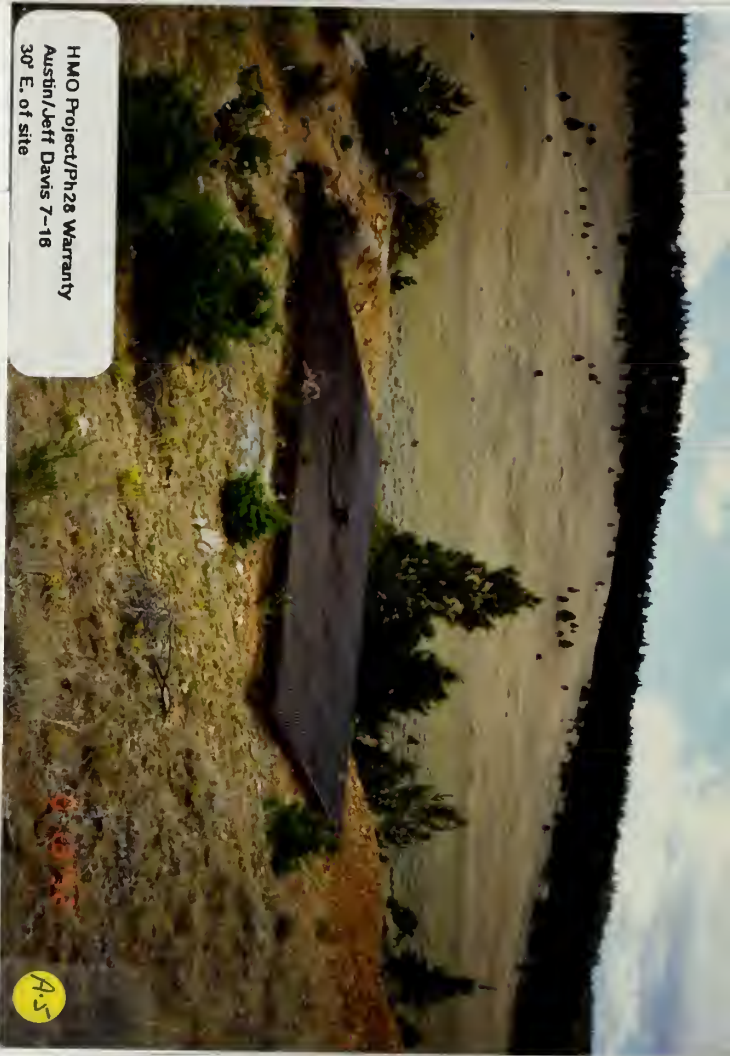
A-2



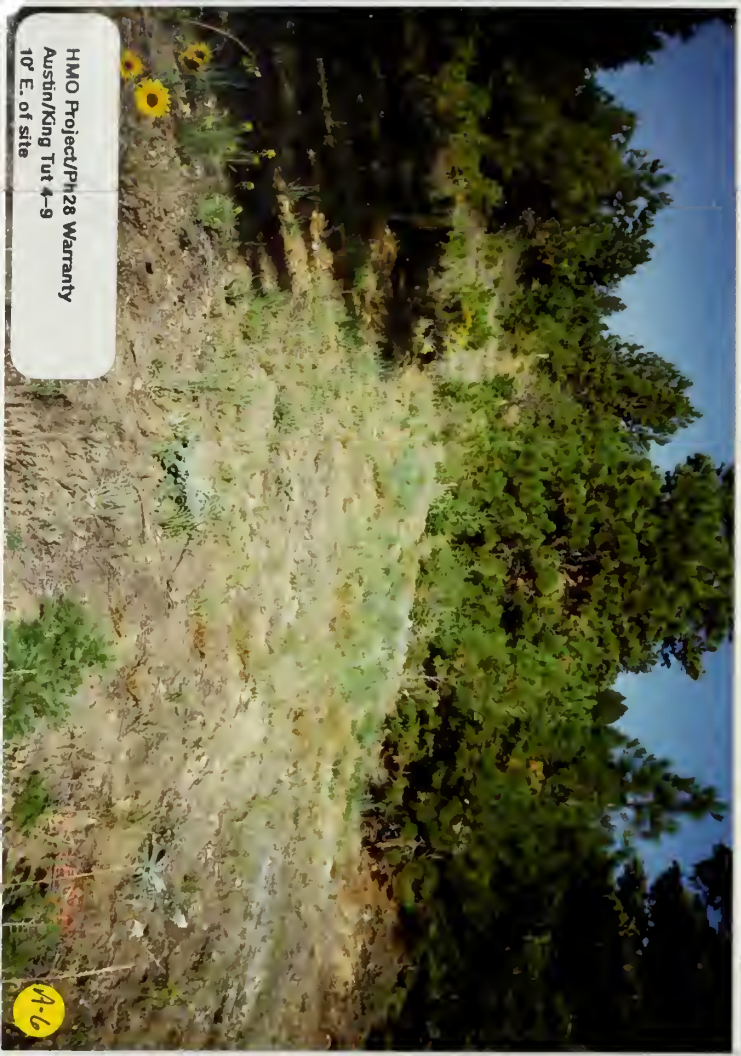
HMO Project/Ph28 Warranty  
Austin/E NW Sec.5 8-8  
20' S. of site

A-3





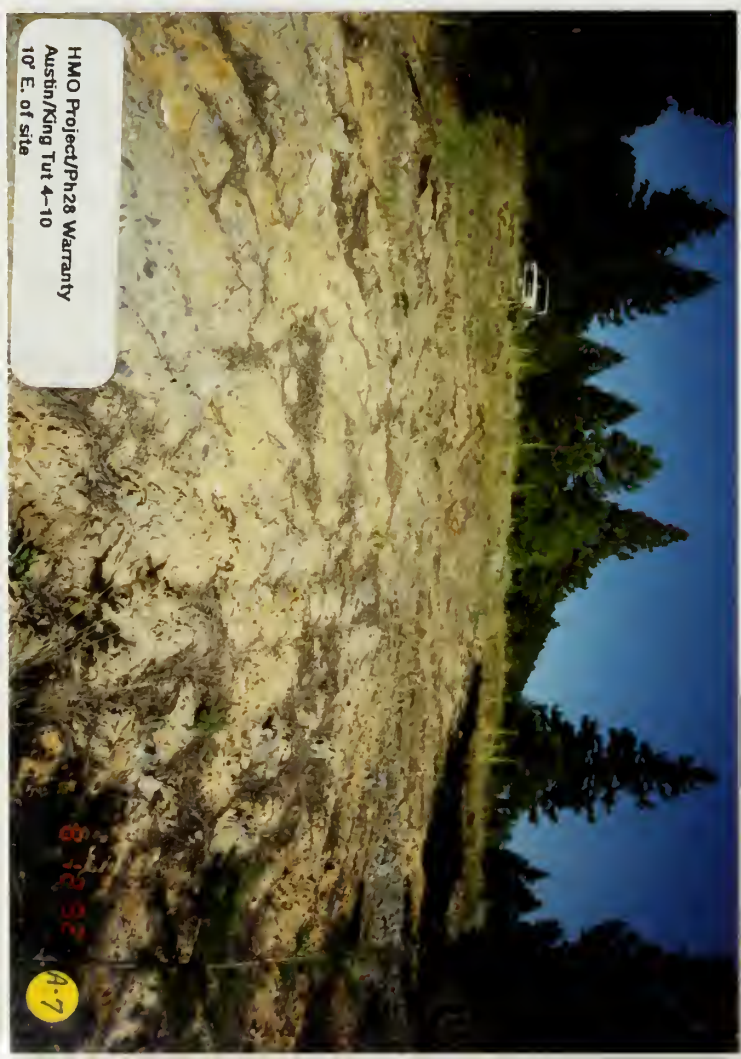
HMO Project/Ph28 Warranty  
Austin/Jeff Davis 7-18  
30' E. of site



HMO Project/Ph28 Warranty  
Austin/King Tut 4-9  
10' E. of site

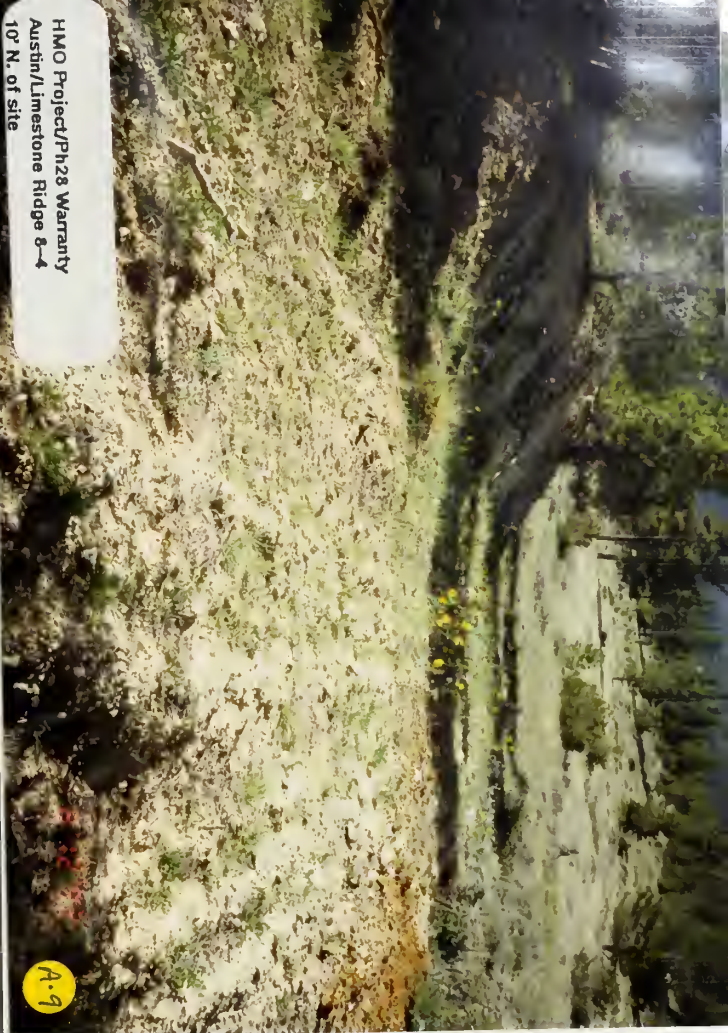


HMO Project/Ph28 Warranty  
Austin/King Tut 4-11  
15' E. of site



HMO Project/Ph28 Warranty  
Austin/King Tut 4-10  
10' E. of site





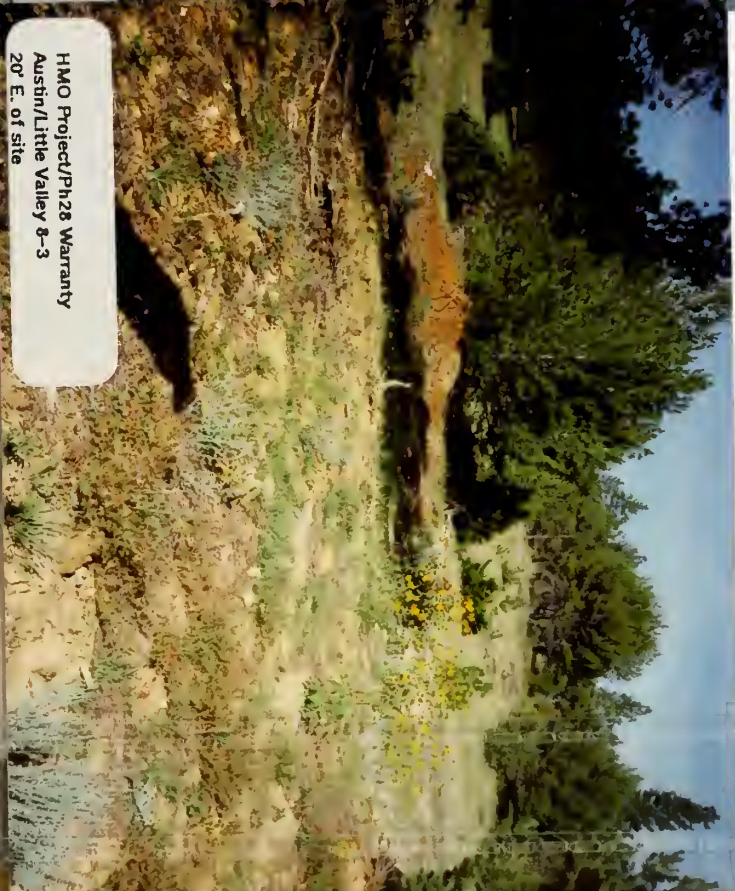
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Austin/Limestone Ridge 8-4  
10' N. of site



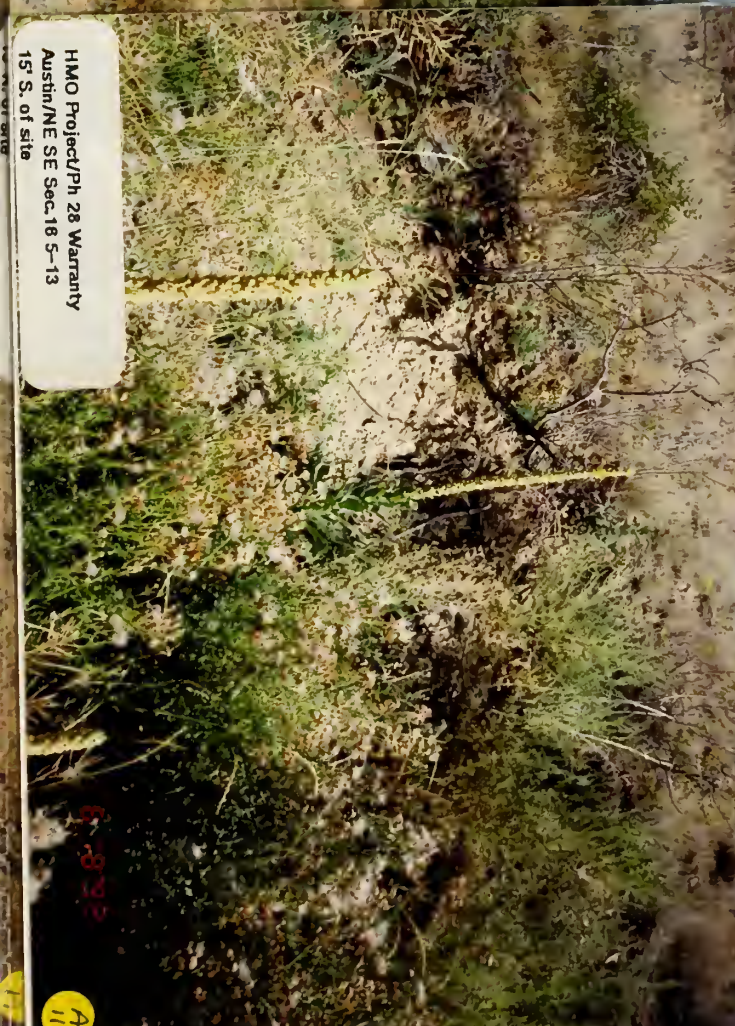
HMO Project/Ph28 Warranty  
Austin/SE NE Sec.3 8-14  
11' S. of site



HMO Project/Ph28 Warranty  
Austin/Scratchgravel 11-12  
10' N. of grate



HMO Project/Ph28 Warranty  
Austin/Little Valley 8-3  
20' E. of site



HMO Project/Ph 28 Warranty  
Austin/NE SE Sec.18 5-13  
15' S. of site

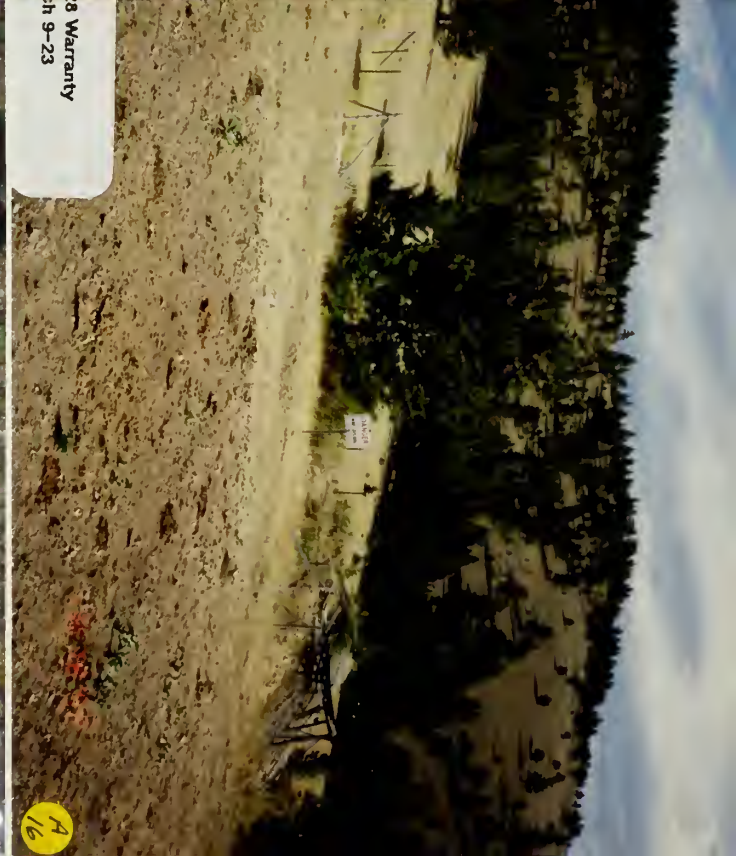




HMO Project/Ph28 Warranty  
Austin/Jeff Davis 7-18  
30' E. of site



HMO Project/Ph28 Warranty  
Austin/SE SW Sec.27 7-17  
40' N. of site



8 Warranty  
h 9-23



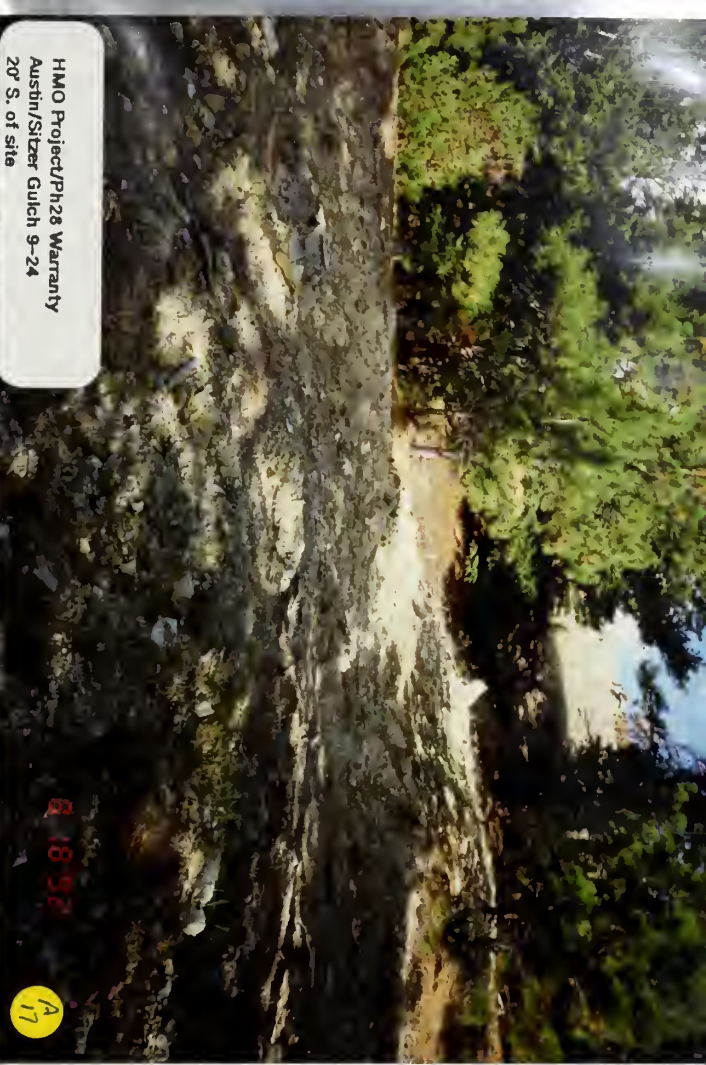
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Austin/Stitzer Gulch 9-21  
20' S. of site



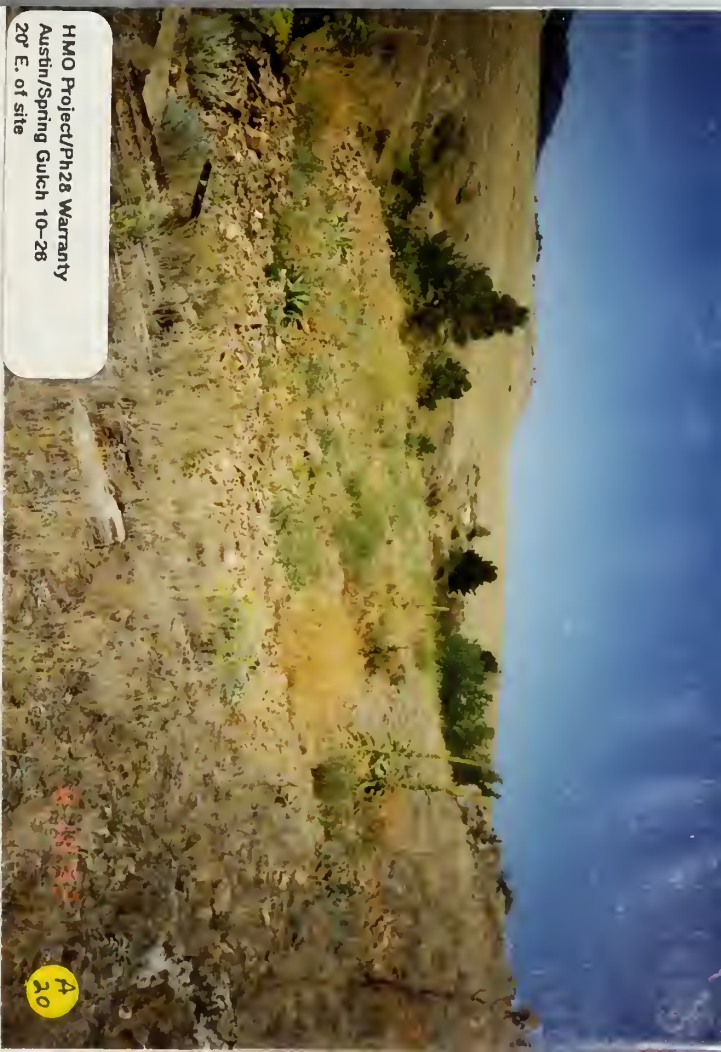
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Austin/Stitzer Gulch 9-22  
50' N. of site



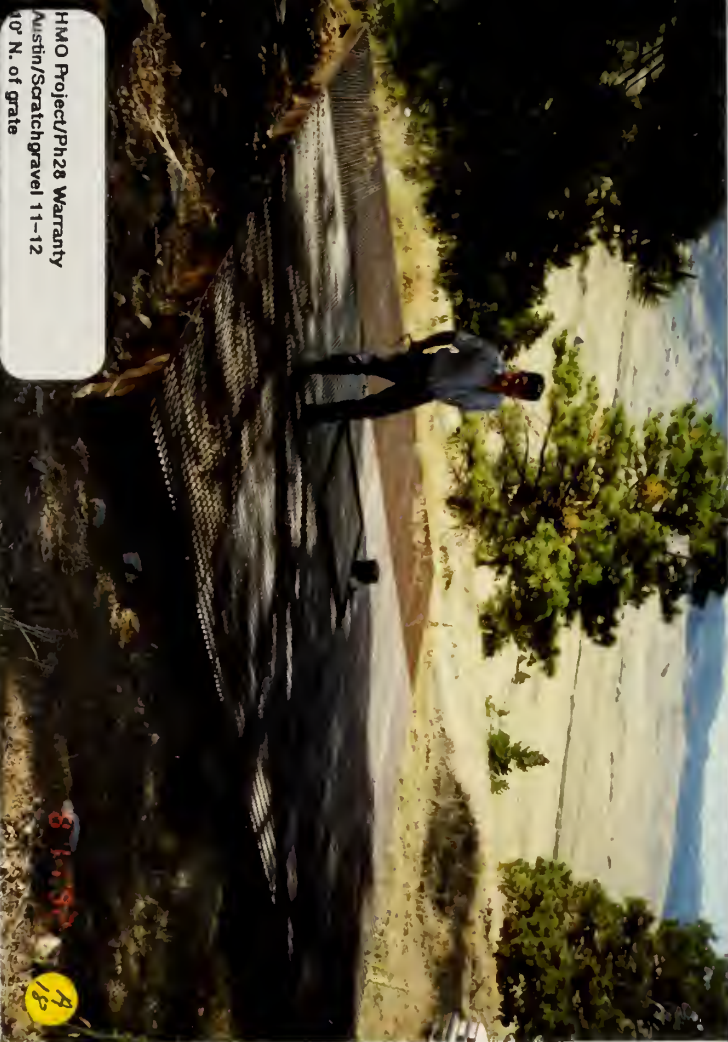
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Austin/Stitzer Gulch 9-24  
20' S. of site



HMO Project/Ph28 Warranty  
Austin/Spring Gulch 10-28  
20' E. of site



HMO Project/Ph28 Warranty  
Austin/Scratchgravel 11-12  
10' N. of grate



HMO Project/Ph28 Warranty  
Austin/Spring Gulch 10-25  
15' N. of site



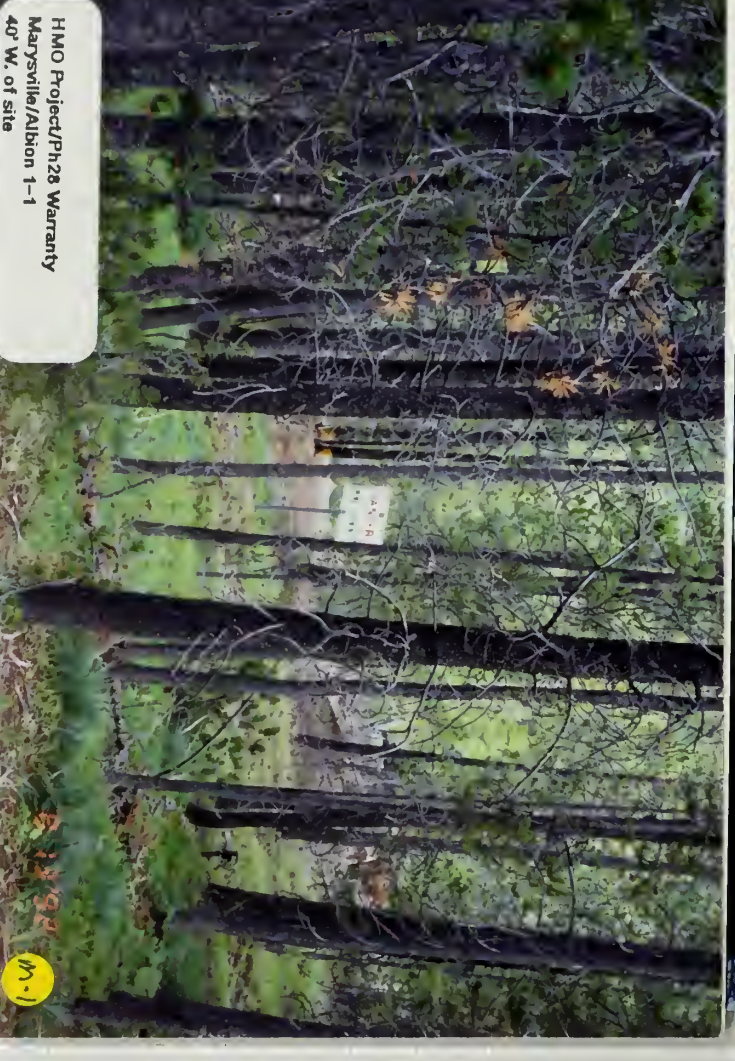




HMO Project/Ph28 Warranty  
Austin/Spring Gulch 10-27  
15' S. of site



HMO Project/Ph28 Warranty  
Marysville/Ample-Hickey 8-3  
20' N. of shaft



HMO Project/Ph28 Warranty  
Marysville/Albion 1-1  
40' W. of site



HMO Project/Ph28 Warranty  
Marysville/Allegheny 2-2  
50' S. of site





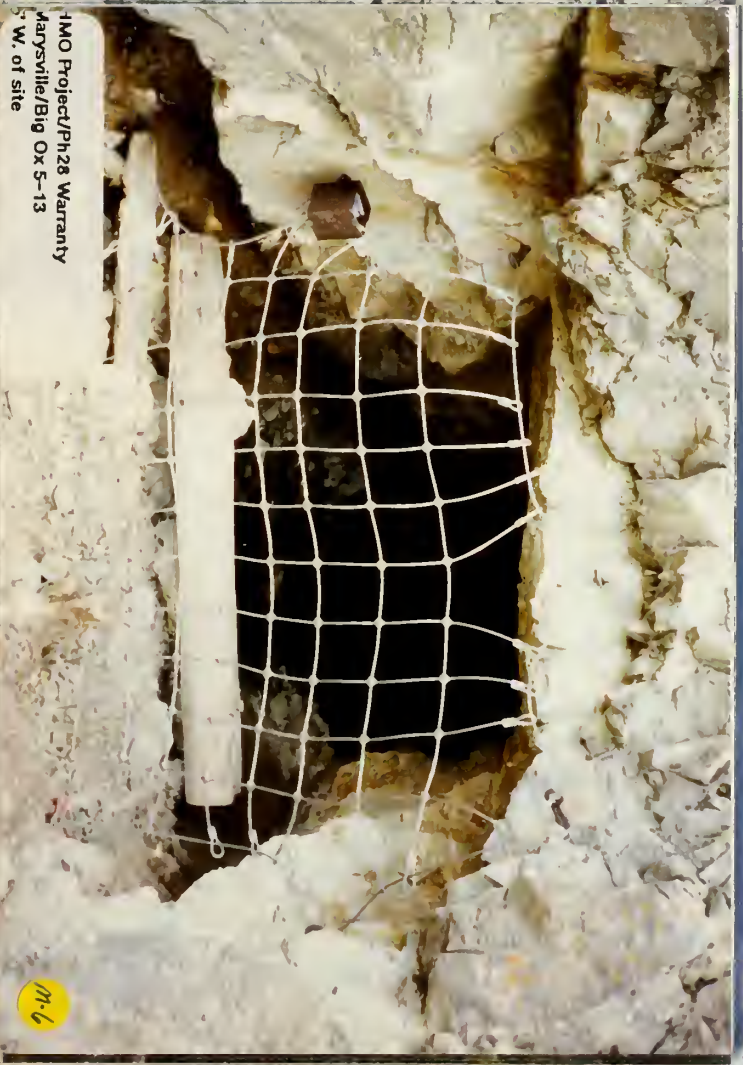
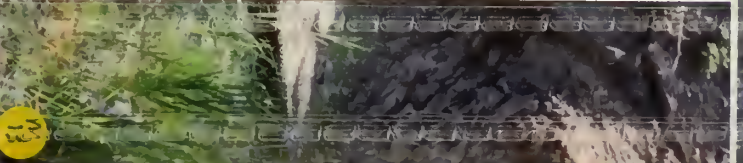
HMO Project/Ph28 Warranty  
Marysville/Ample-Hickey 8-4  
50' N. of site



HMO Project/Ph28 Warranty  
Marysville/Big Ox 5-14  
5' S. of site



HMO Project/Ph28 Warranty  
Marysville/Big Ox 5-11  
25' S. of site



HMO Project/Ph28 Warranty  
Marysville/Big Ox 5-13  
5' W. of site

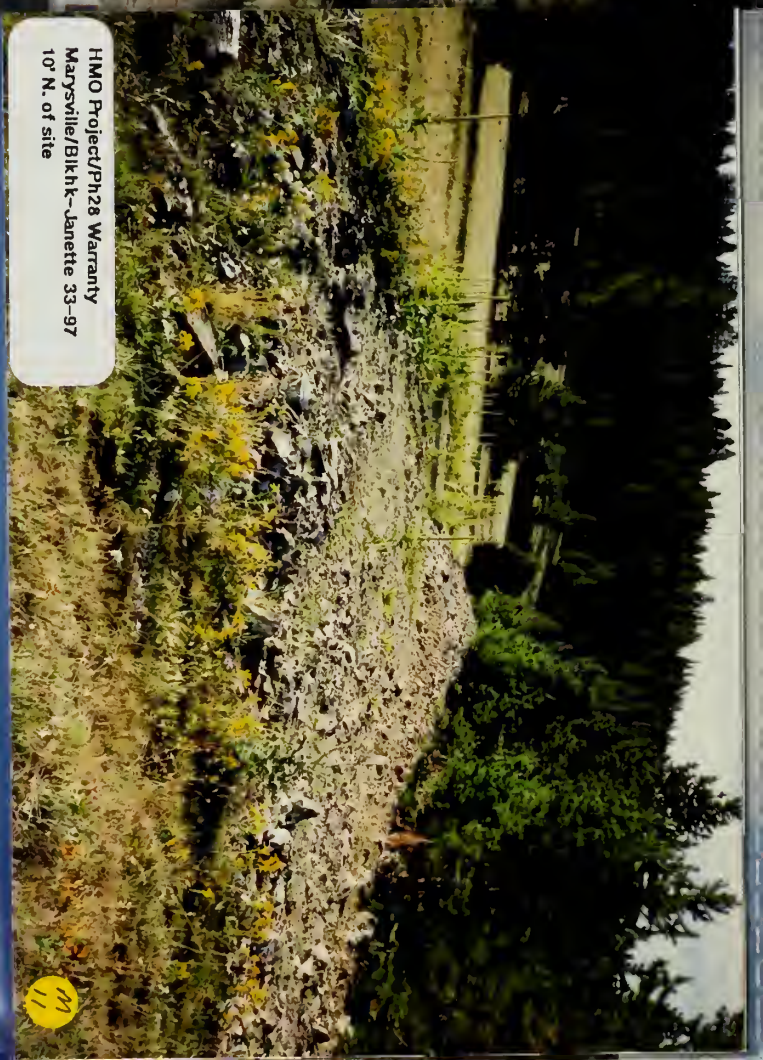




HMO Project/Ph28 Warranty  
Marysville/Black Douglas 7-15  
10' W. of site



HMO Project/Ph28 Warranty  
Marysville/Black-Janette 33-16  
20' N. of site



HMO Project/Ph26 Warranty  
Marysville/Black-Janette 33-97  
10' N. of site



HMO Project/Ph26 Warranty  
Marysville/Black-Janette 33-17  
20' E. of site

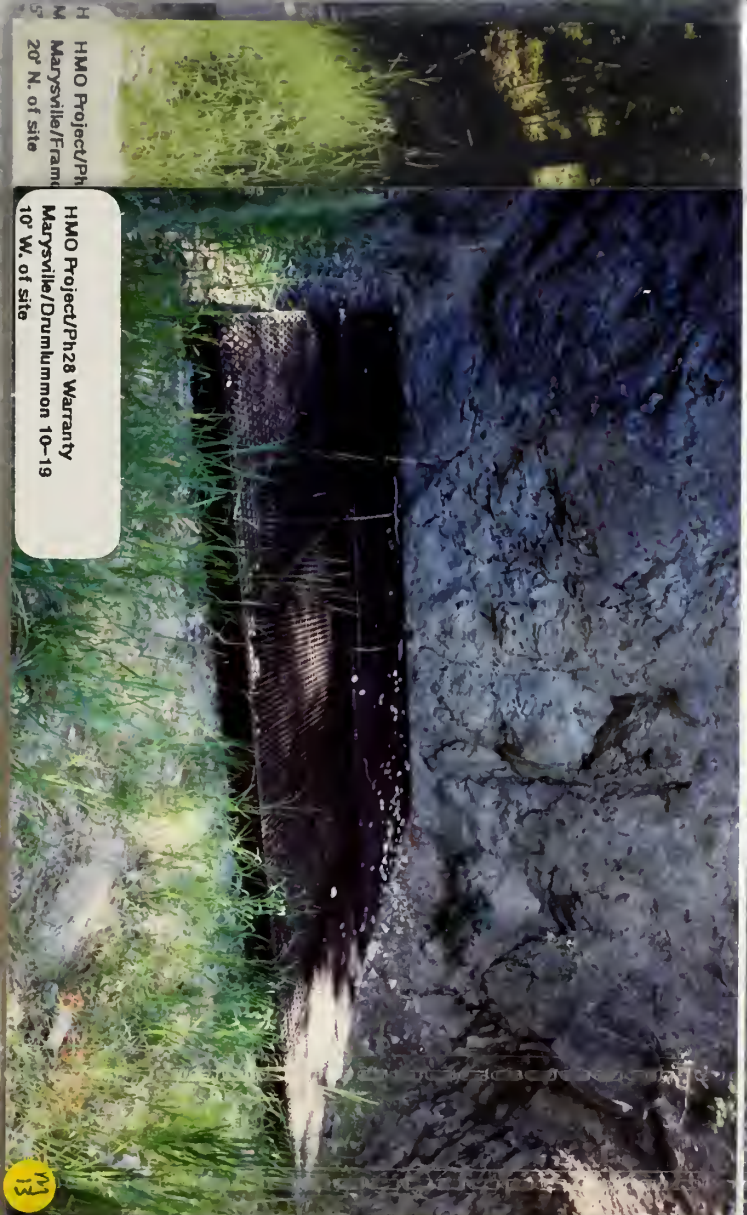




HMO Project/Ph28 Warranty  
Marysville/Bikih-Jarrette 33-98  
10' E. of site

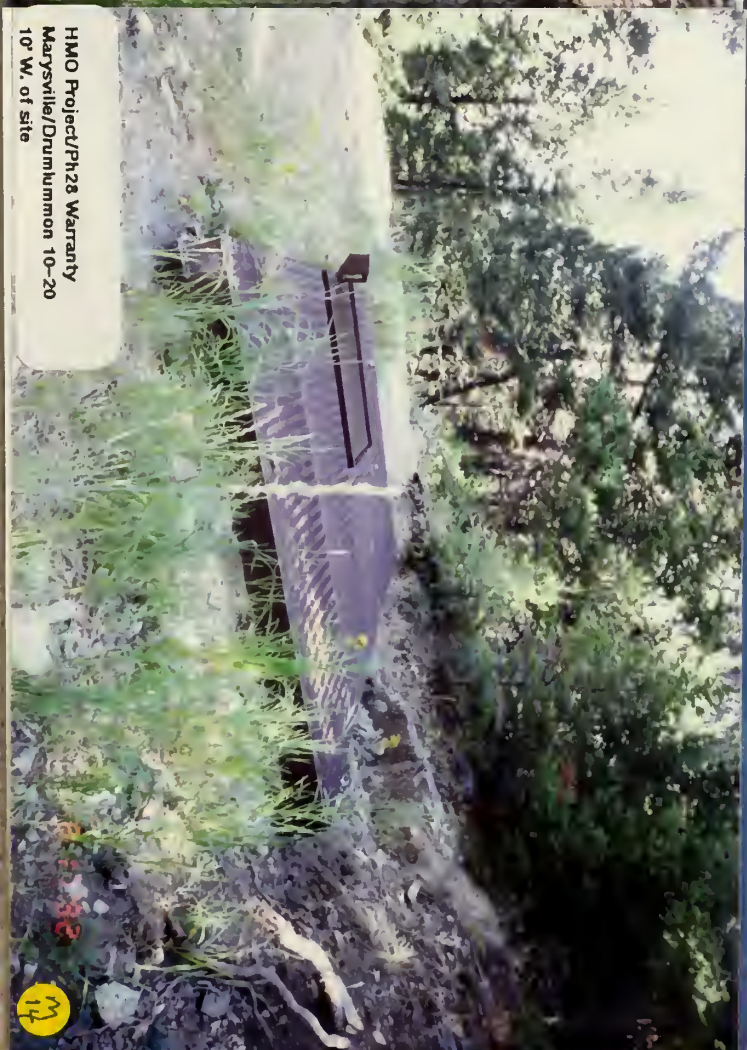


HMO Project/Ph28 Warranty  
Marysville/Drumlummon 10-26,27,28  
40' W. of site



HMO Project/Ph  
Marysville/Fram  
20' N. of site

HMO Project/Ph28 Warranty  
Marysville/Drumlummon 10-19  
10' W. of site



HMO Project/Ph28 Warranty  
Marysville/Drumlummon 10-20  
10' W. of site





HMO Project/Ph28 Warranty  
Marysville/Drumhummmon 10-29,31  
10' N. of site



HMO Project/Ph28 Warranty  
Marysville/Drumhummmon 10-30  
5' N. of site



HMO Project/Ph28 Warranty  
Marysville/Drumhummmon 10-33  
10' S. of site



HMO Project/Ph28 Warranty  
Marysville/Drumhummmon 10-32  
25' S. of site





HMO Project/Ph28 Warranty  
Marysville/E.F.L. 39-35  
5' W. of site



HMO Project/Ph28 Warranty  
Marysville/Empire 12-38  
5' S. of adit



HMO Project/Ph28 Warranty  
Marysville/Earthquake 40-36  
10' S. of site



HMO Project/Ph28 Warranty  
Marysville/Emma Miller 11-37  
30' W. of site

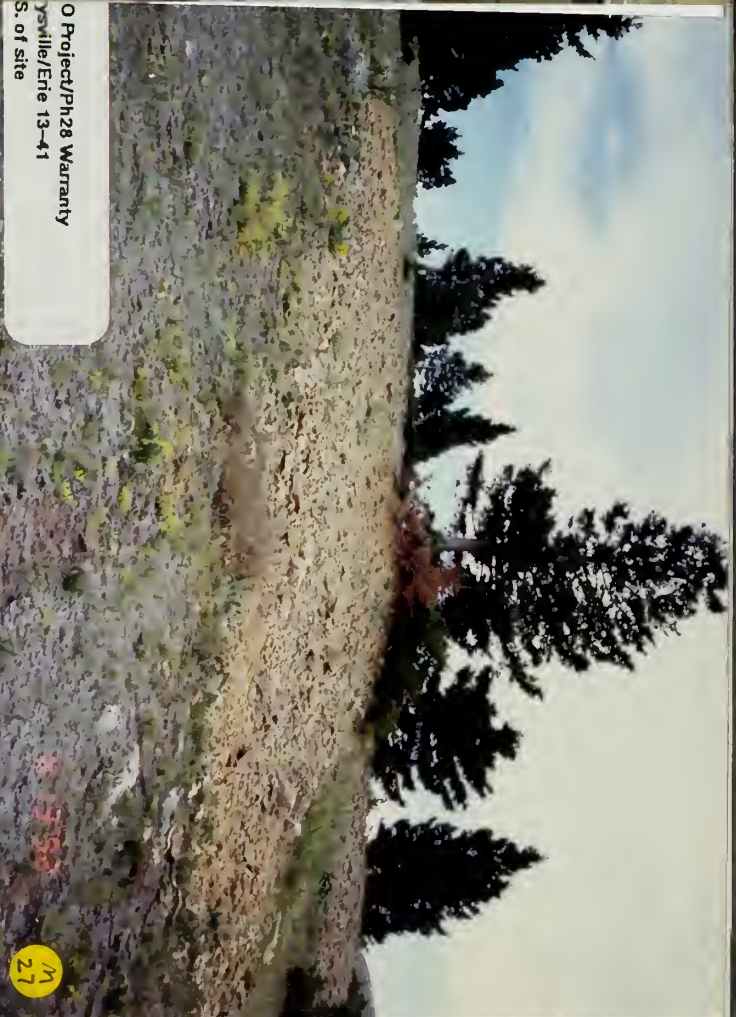


HMO Project/F  
Marysville/Dnu  
10' N. of site



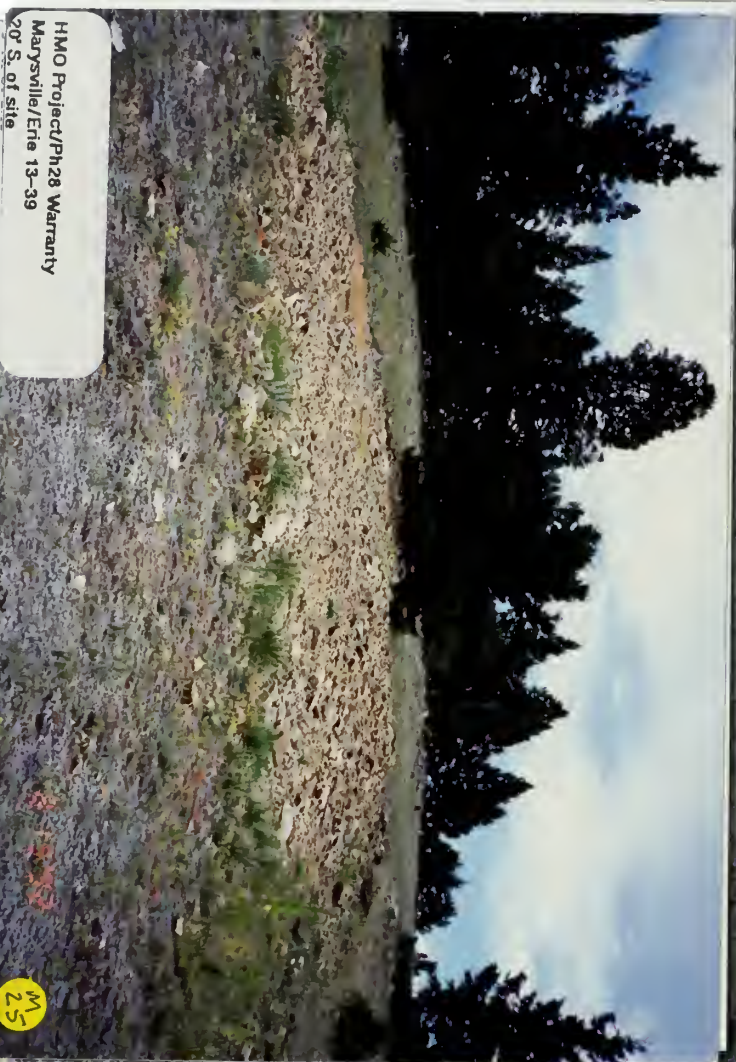
M1  
24

O Project/Ph28 Warranty  
Marysville/Enre 13-41  
S. of site



M1  
27

HMO Project/Ph28 Warranty  
Marysville/Enre 13-39  
20' S. of site



M1  
25

HMO Project/Ph28 Warranty  
Marysville/Enre 13-40  
20' S. of site



M1  
26





HMO Project/Ph28 Warranty  
Marysville/Fraction 20-42  
30' S. of site

8-17-92

M 28



HMO Project/Ph28 Warranty  
Marysville/Genesee 14-44  
West line of fence

8-17-92

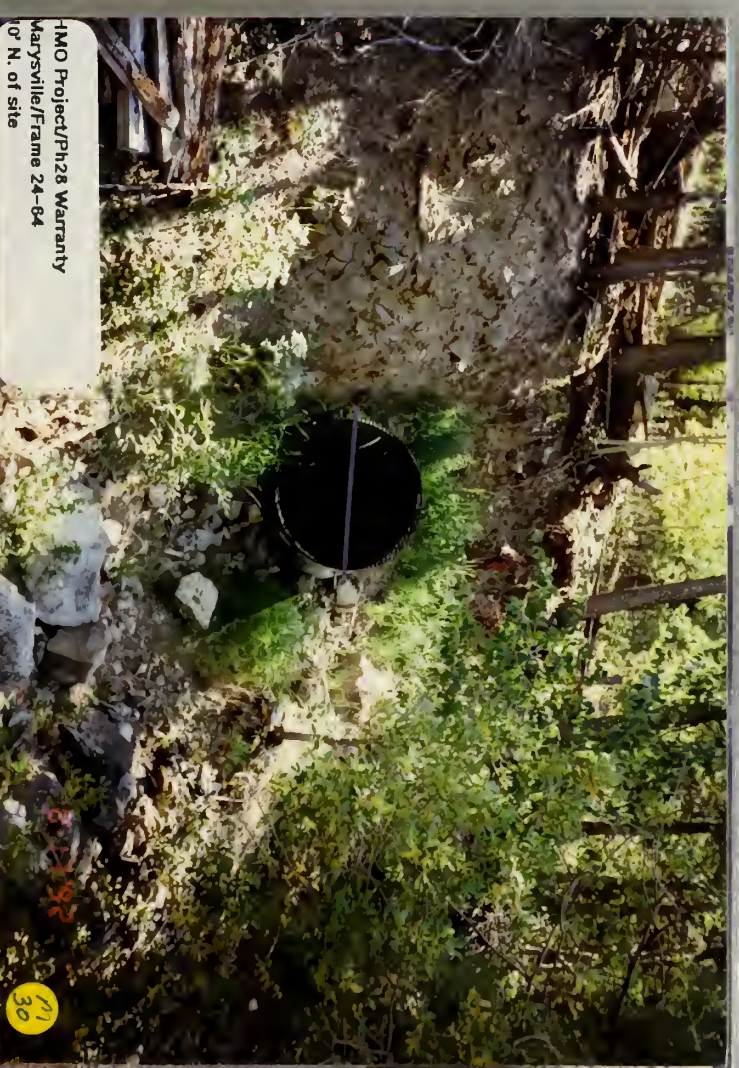
M 31



HMO Project/Ph28 Warranty  
Marysville/Fraction 24-63  
20' N. of site

8-17-92

M 29



HMO Project/Ph28 Warranty  
Marysville/Fraction 24-64  
10' N. of site

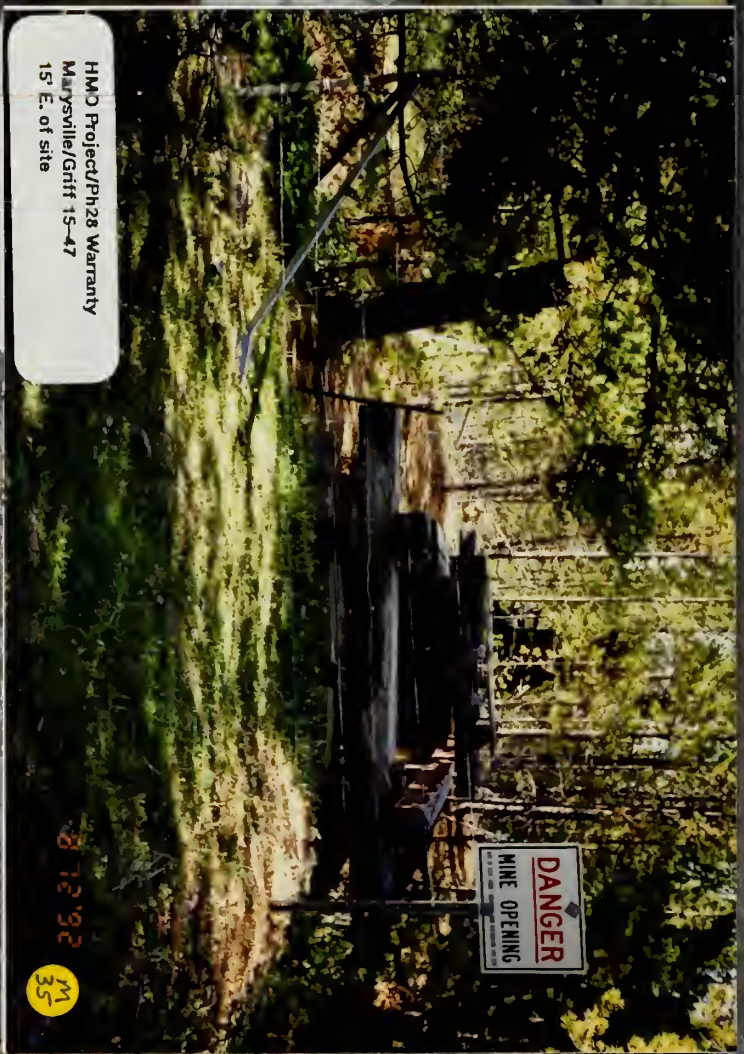
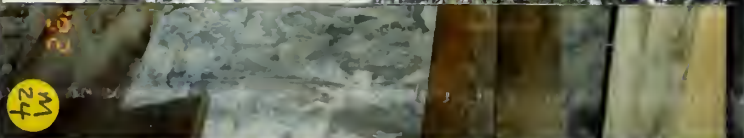
8-17-92

M 30





HMO Project/Ph28 Warranty  
Marysville/Genesee 14-45  
Northwest line of fence



HMO Project/Ph28 Warranty  
Marysville/Griff 15-47  
15' E. of site



HMO Project/Ph28 Warranty  
Marysville/Genesee 14-45  
North line of fence

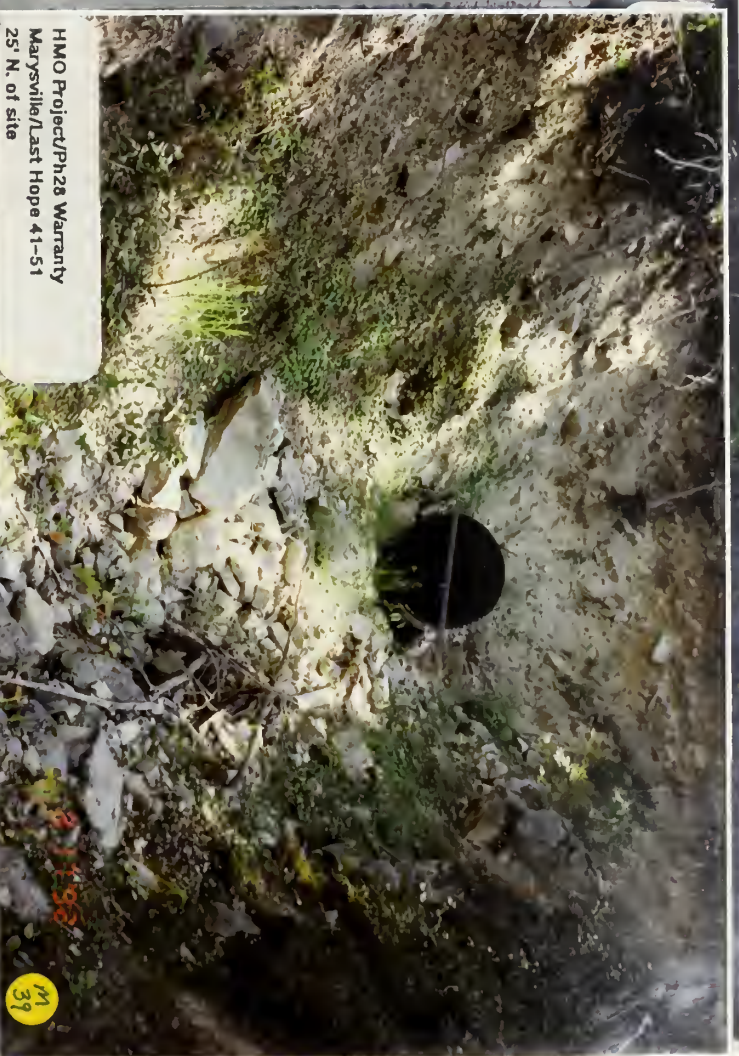


HMO Project/Ph28 Warranty  
Marysville/Genesee 14-46  
20' S. of site





HMO Project/Ph28 Warranty  
Marysville/Kenawa 18-48  
20' N. of site



HMO Project/Ph28 Warranty  
Marysville/Larson 41-51  
25' N. of site

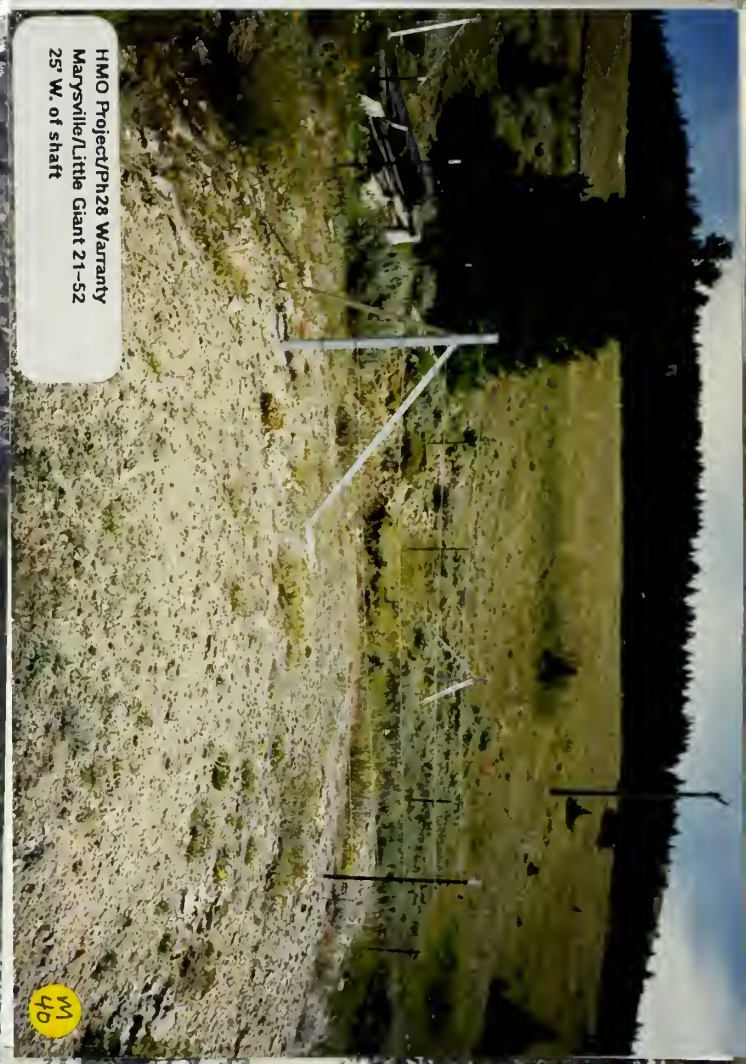


HMO Project/Ph28 Warranty  
Marysville/Kenawa 18-49  
5' W. of site

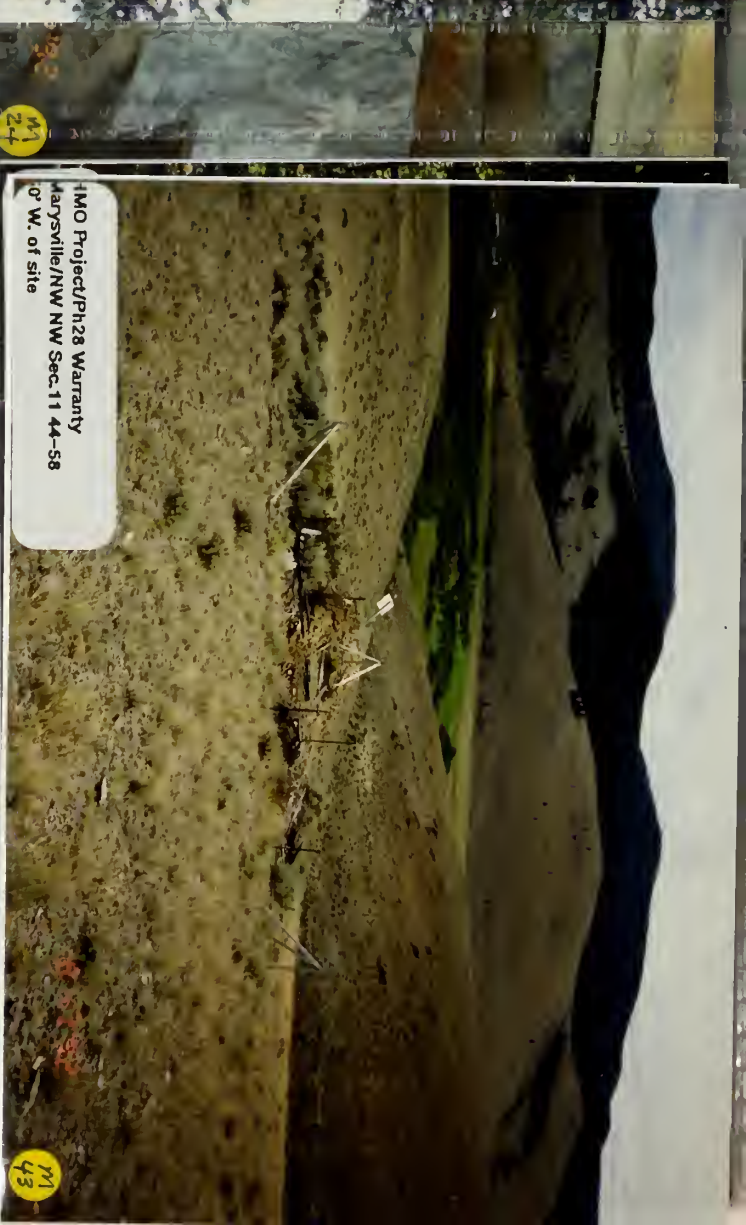


HMO Project/Ph28 Warranty  
Marysville/Larson 19-50  
15' NW of site





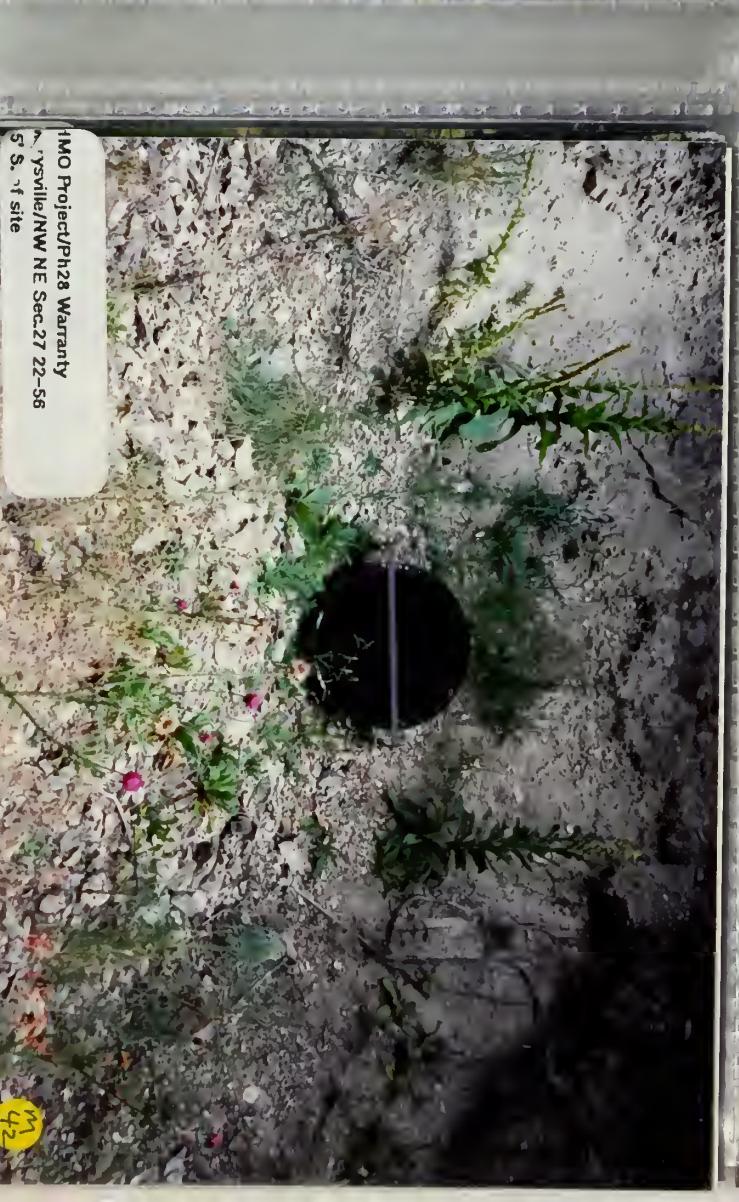
HMO Project/Ph28 Warranty  
Marysville/Little Giant 21-52  
25' W. of shaft



HMO Project/Ph28 Warranty  
Marysville/NW NW Sec.11 44-58  
10' W. of site

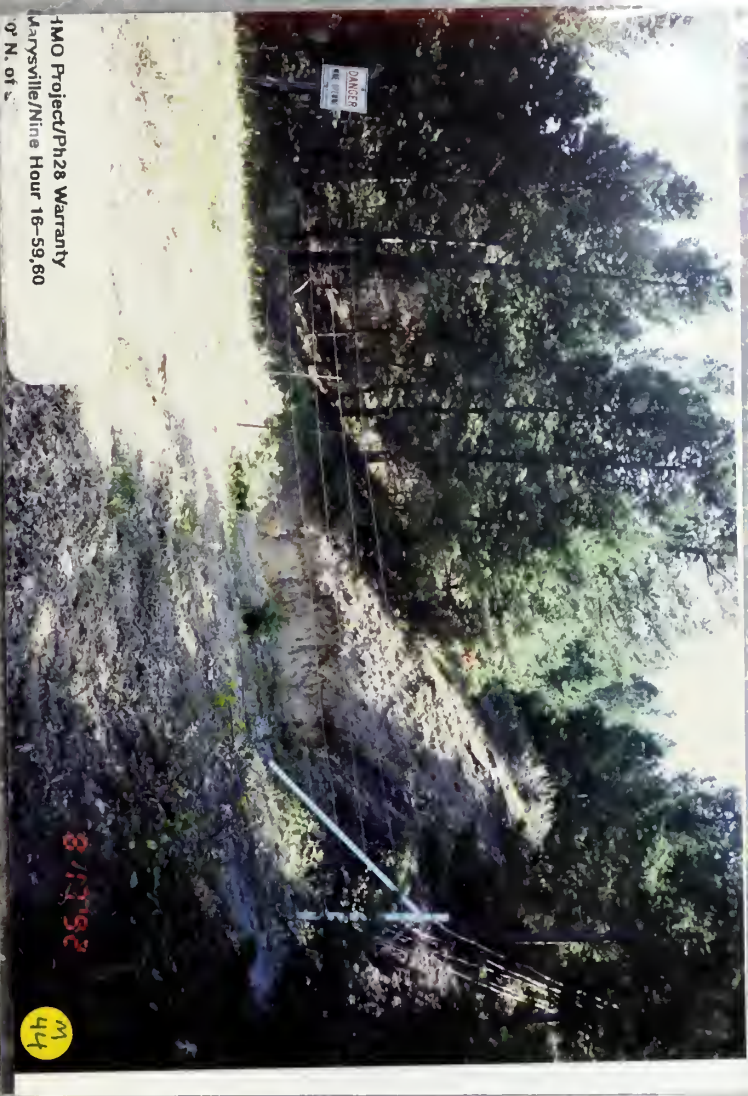


HMO Project/Ph28 Warranty  
Marysville/NW NE Sec.27 22-53  
5' S. of site



HMO Project/Ph28 Warranty  
Marysville/NW NE Sec.27 22-56  
5' S. of site





HMO Project/Ph28 Warranty  
Marysville/Nine Hour 16-59, 60  
of N. of

8/13/92

M 44



HMO Project/Ph28 Warranty  
Marysville/North Star 3-23  
15 N. of site

M 47



HMO Project/Ph28 Warranty  
Marysville/North Star 3-21  
20' N. of site

M 45



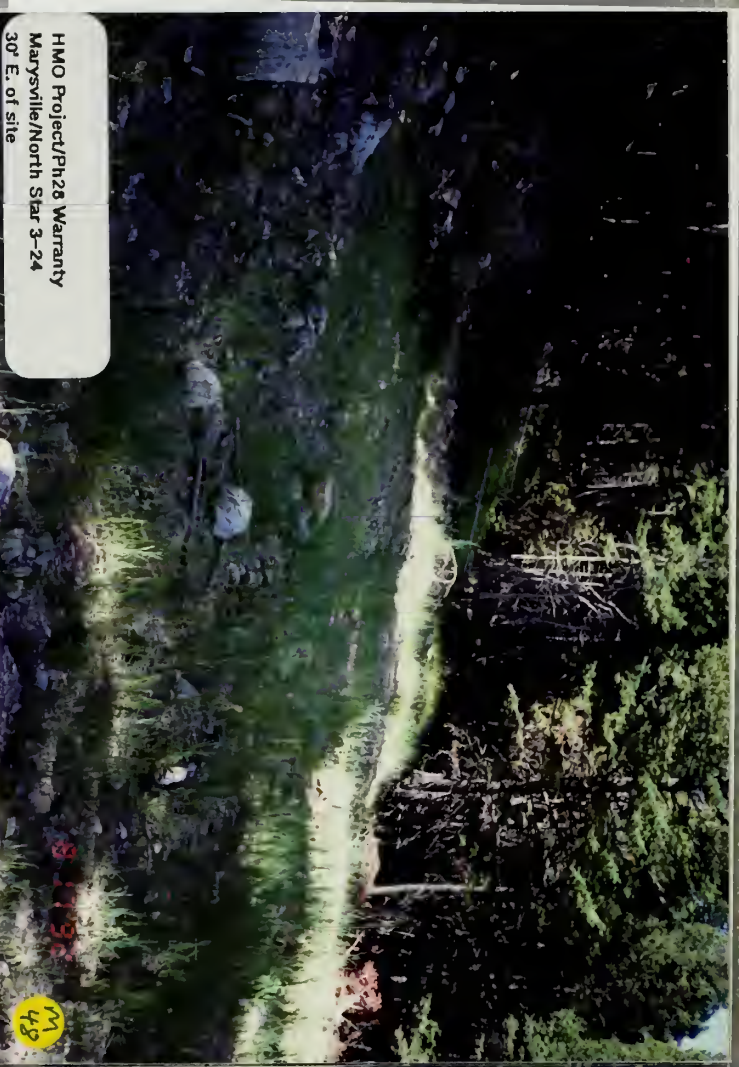
HMO Project/Ph28 Warranty  
Marysville/North Star 3-22  
40' N. of site

8/13/92

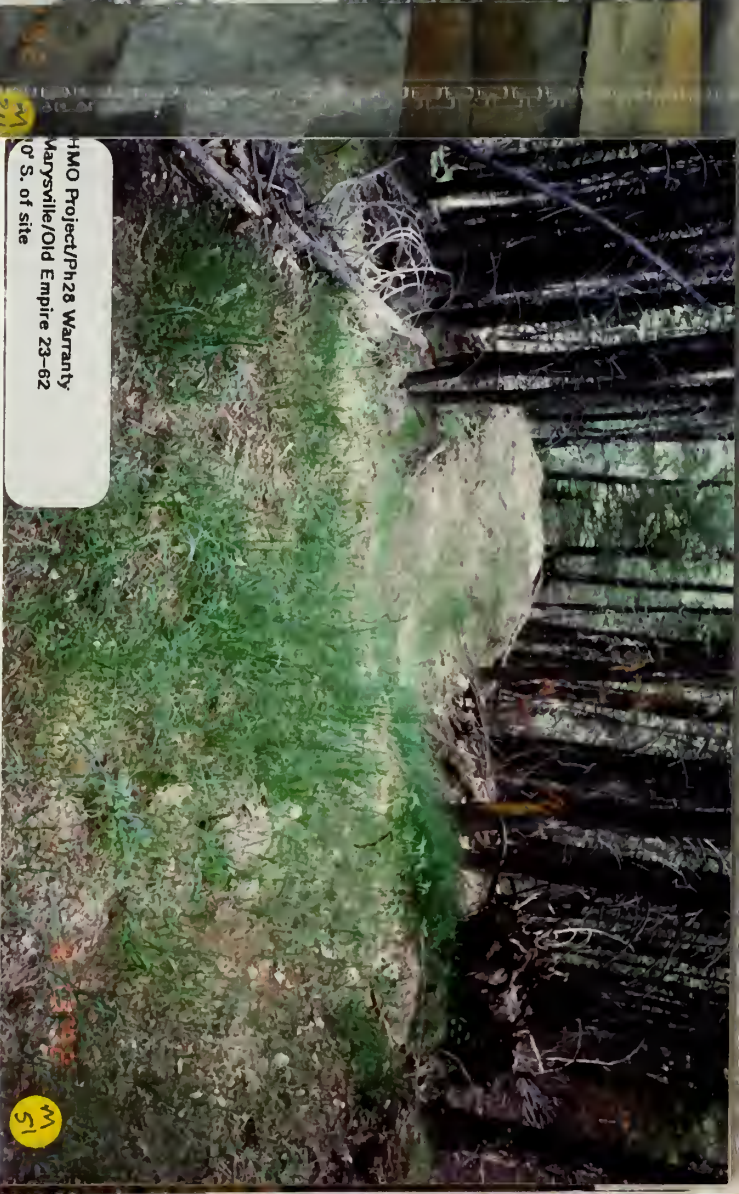
M 46



HMO Project/Ph28 Warranty  
Marysville/North Star 3-24  
30' E. of site



HMO Project/Ph28 Warranty  
Marysville/Old Empire 23-62  
10' S. of site



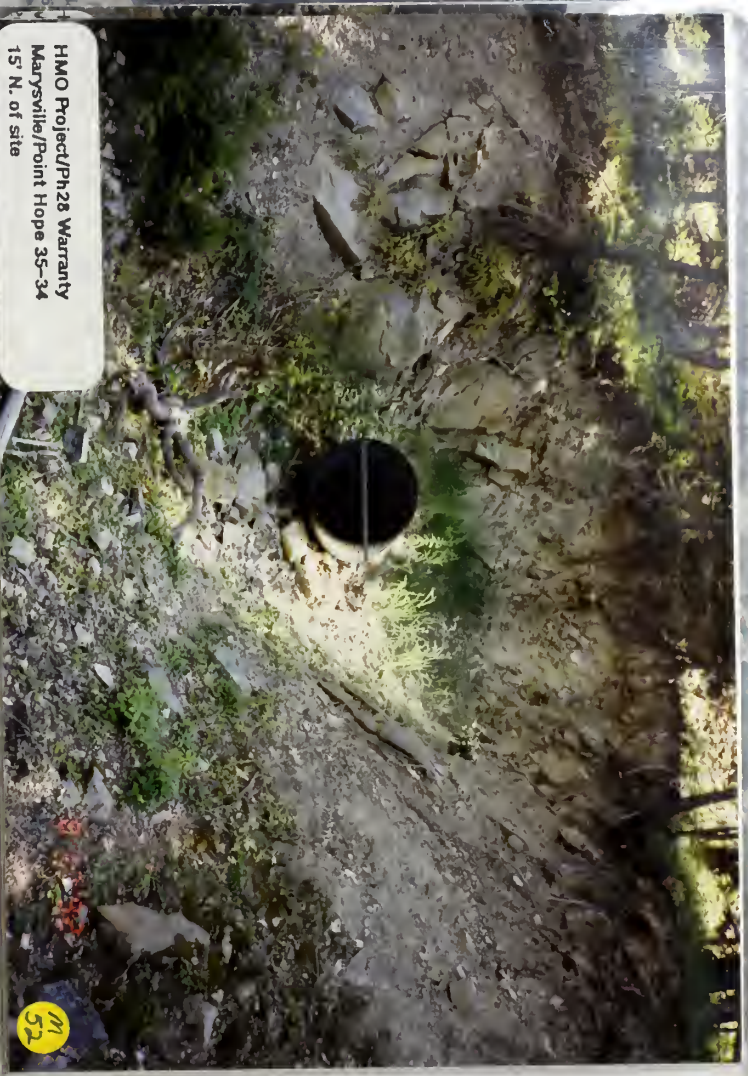
HMO Project/Ph28 Warranty  
Marysville/North Star 3-25  
20' W. of site



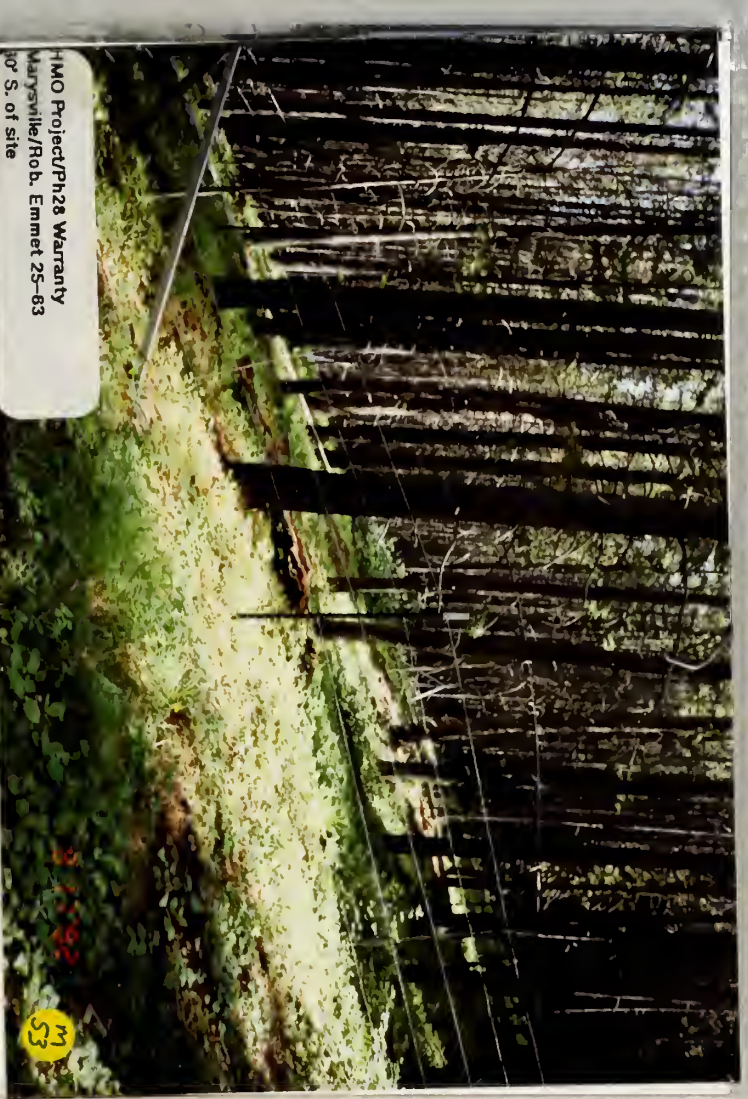
HMO Project/Ph28 Warranty  
Marysville/Old Empire 23-61  
25' W. of site







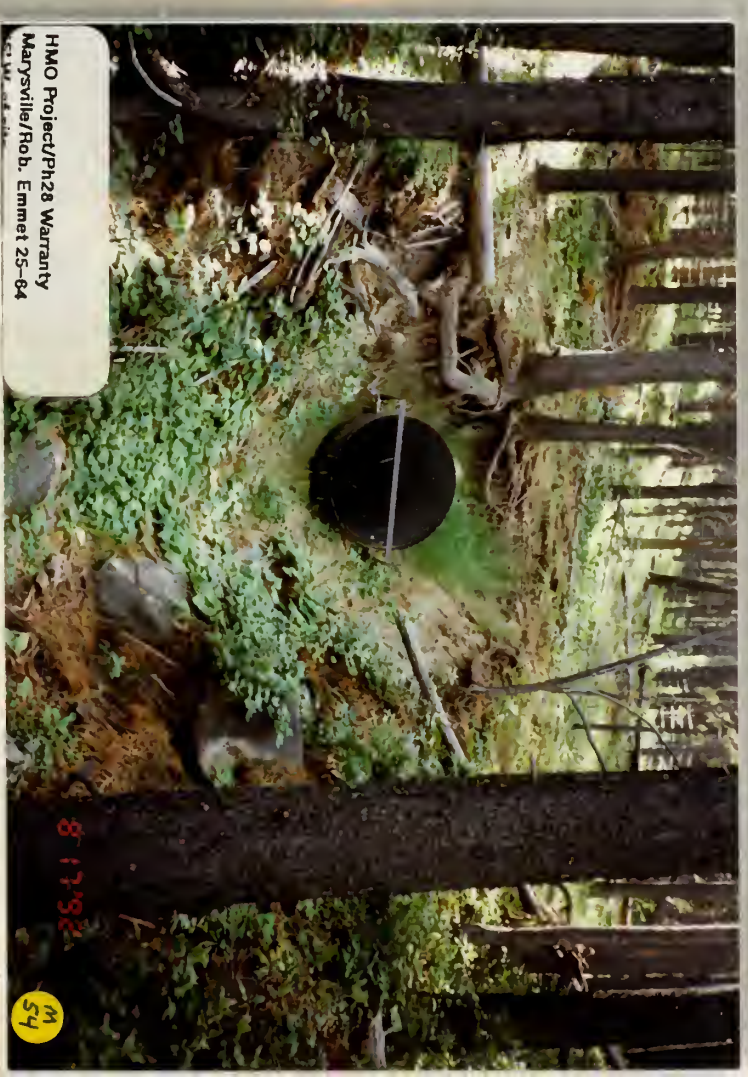
HMO Project/Ph28 Warranty  
Marysville/Point Hope 35-34  
15' N. of site



HMO Project/Ph28 Warranty  
Marysville/Rob. Emmet 25-63  
30' S. of site

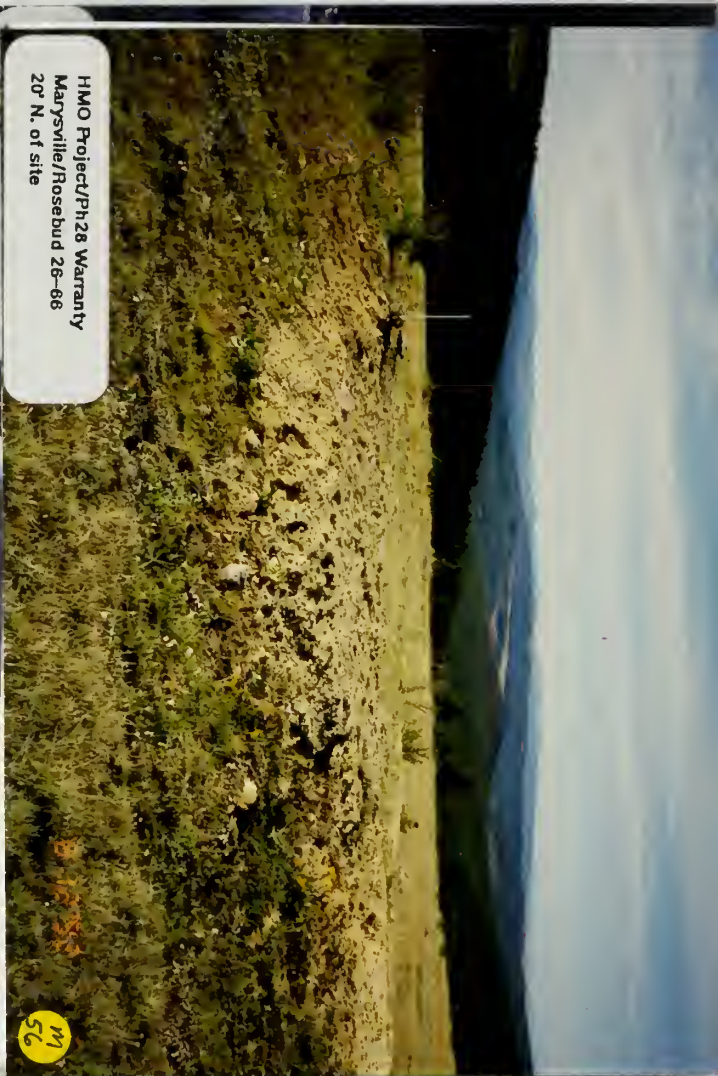


HMO Project/Ph28 Warranty  
Marysville/Rob. Emmet 25-65  
30' W. of site

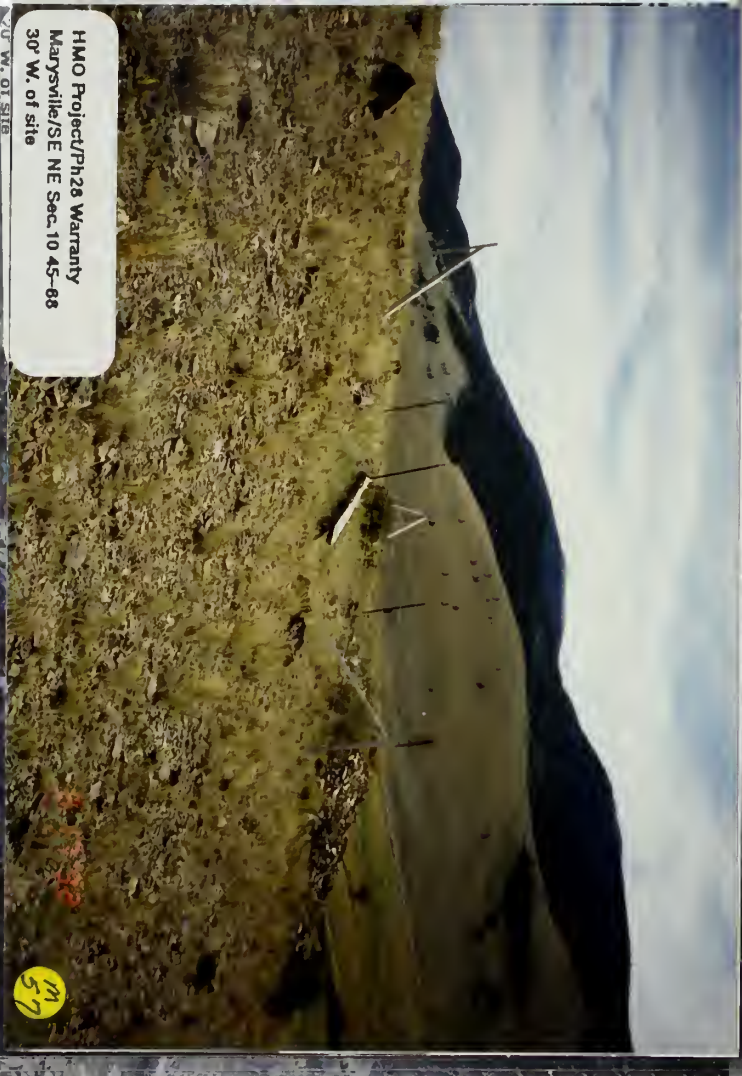


HMO Project/Ph28 Warranty  
Marysville/Rob. Emmet 25-64

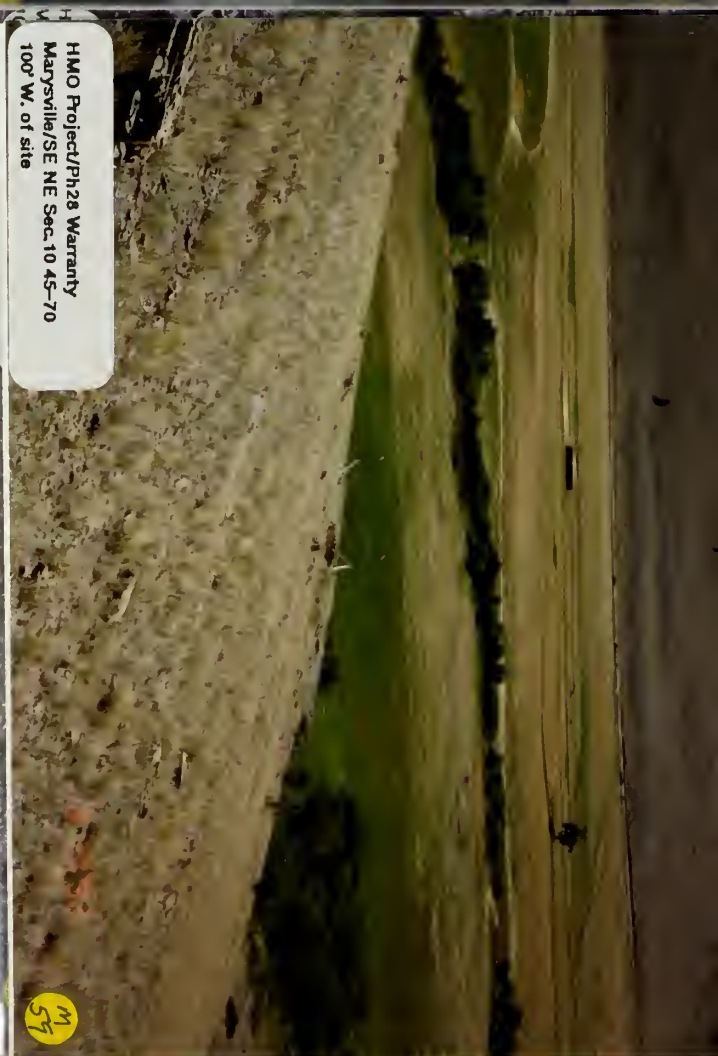




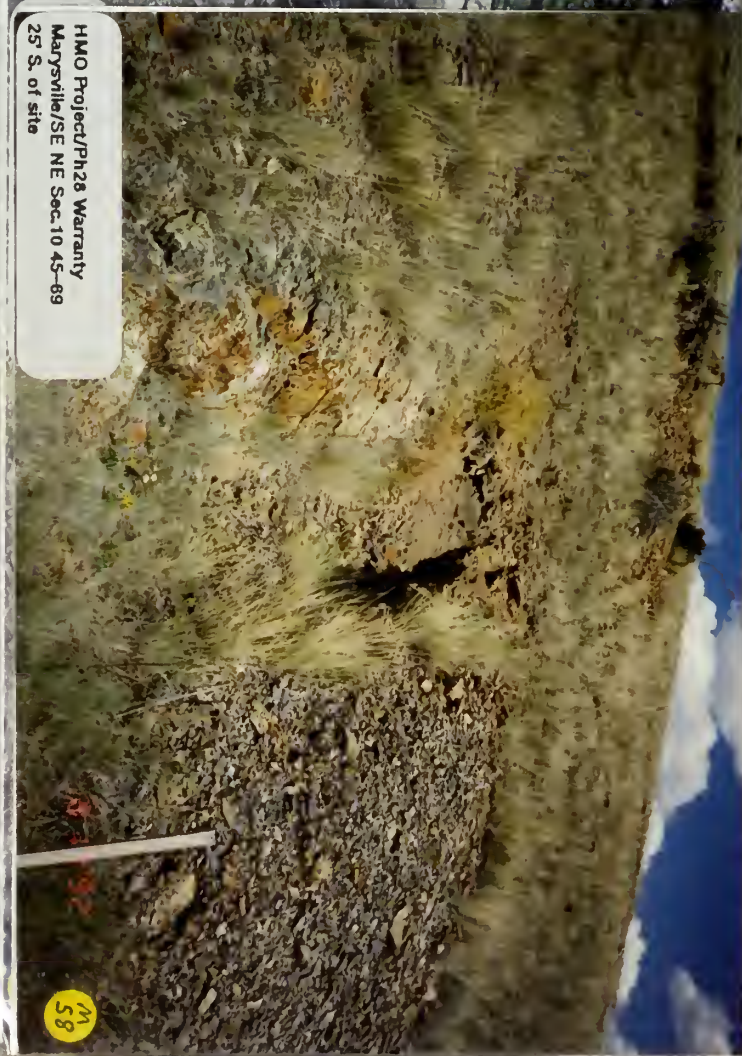
HMO Project/Ph28 Warranty  
Marysville/Rosebud 26-66  
20' N. of site



HMO Project/Ph28 Warranty  
Marysville/SE NE Sec.10 45-68  
30' W. of site



HMO Project/Ph28 Warranty  
Marysville/SE NE Sec.10 45-70  
100' W. of site

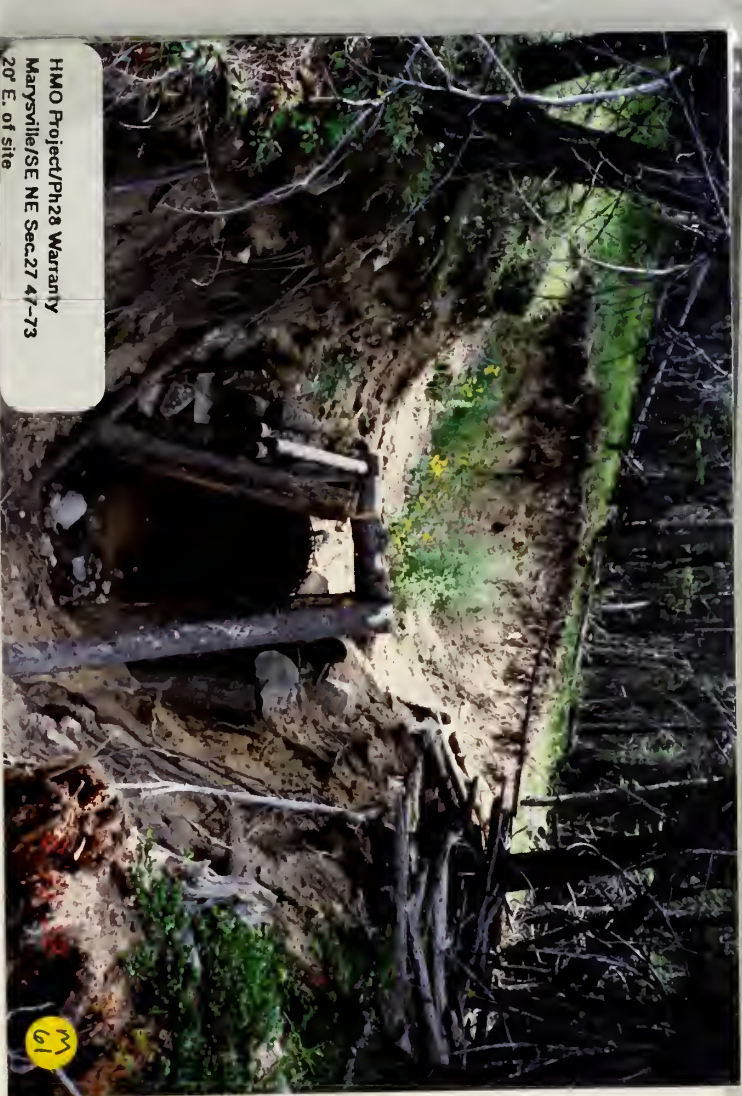


HMO Project/Ph28 Warranty  
Marysville/SE NE Sec.10 45-69  
25' S. of site

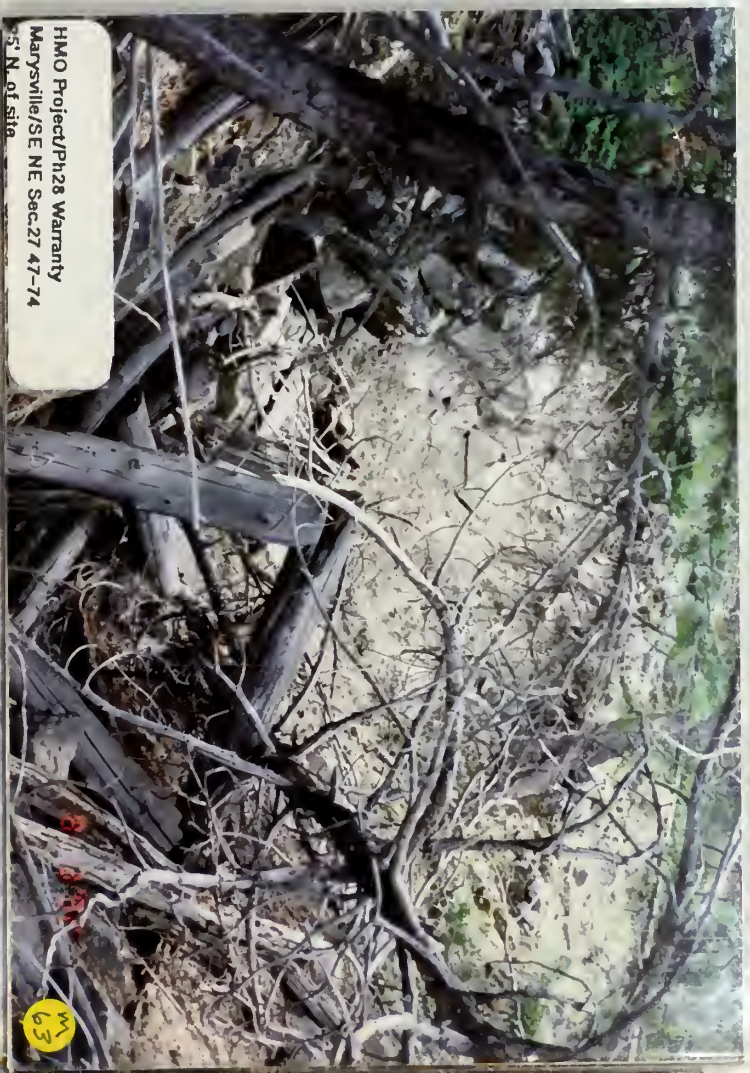




HMO Project/Ph28 Warranty  
Marysville/SE NE Sec.10 45-72  
20' W. of site



HMO Project/Ph28 Warranty  
Marysville/SE NE Sec.27 47-73  
20' E. of site



HMO Project/Ph28 Warranty  
Marysville/SE NE Sec.27 47-74  
15' N. of site



HMO Project/Ph28 Warranty  
Marysville/Big Ox S-12  
15' S. of site



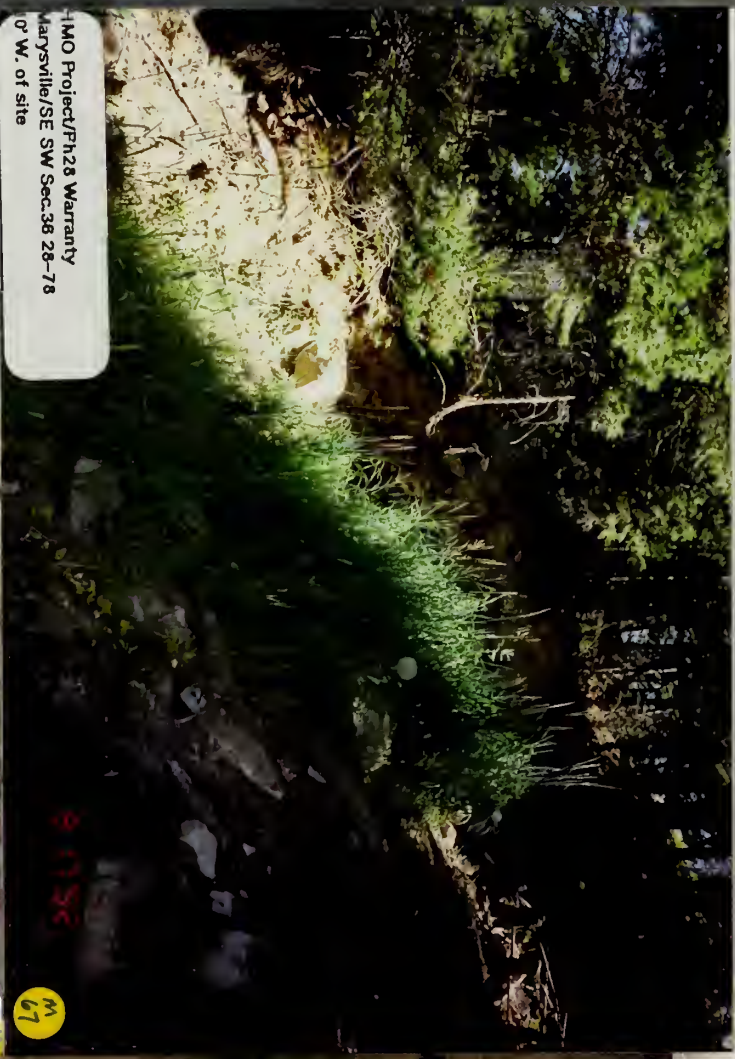


HMO Project/Ph28 Warranty  
Marysville/SE SE Sec. 29 42-75  
15' S. of opening

HMO Project/Ph28 Warranty  
Marysville/Rosebud 26-68



HMO Project/Ph28 Warranty  
Marysville/SE SW Sec. 33 27-76  
10' S. of site



HMO Project/Ph28 Warranty  
Marysville/SE SW Sec. 36 28-78  
10' W. of site

HMO Project/Ph28 Warranty  
Marysville/SE NE Sec. 10 45-70



HMO Project/Ph28 Warranty  
Marysville/SE SW Sec. 36 28-77  
30' W. of site





HMO Project/Ph28 Warranty  
Marysville/Shannon 30-98  
10' N. of site



HMO Project/Ph28 Warranty  
Marysville/SW NE Sec.31 29-79  
20' S. of site



HMO Project/Ph28 Warranty  
Marysville/SW SW Sec. 30 43-81  
10' S. of site



HMO Project/Ph28 Warranty  
Marysville/SW SW Sec. 10 40-80  
80' E. of site

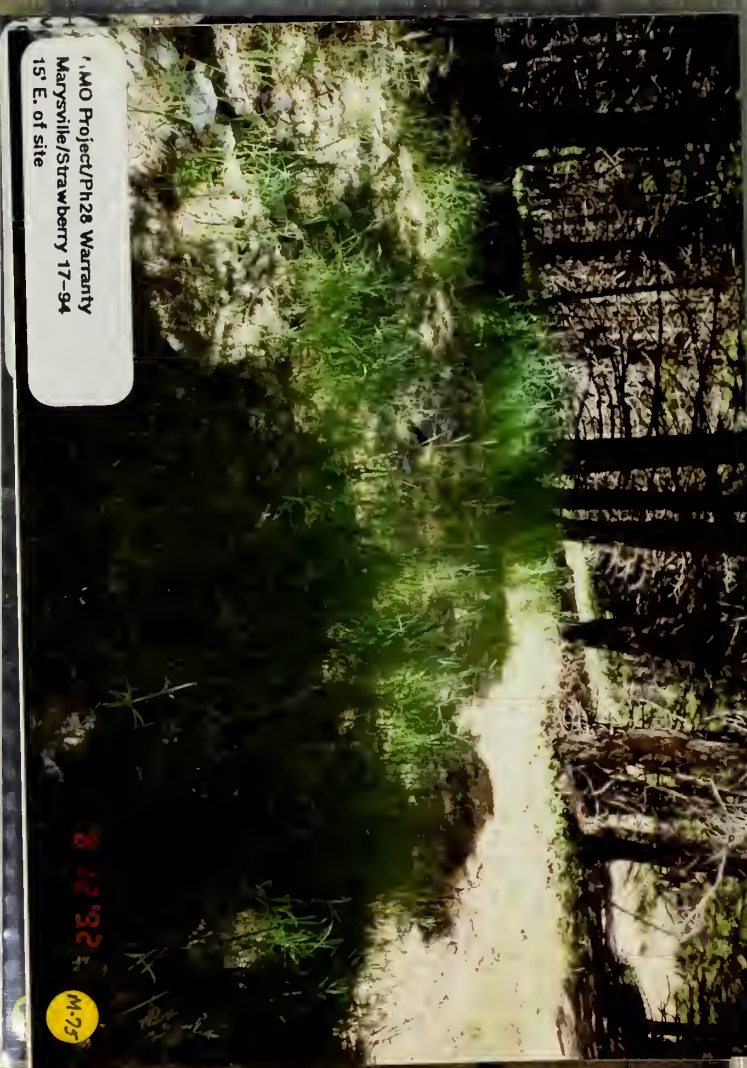




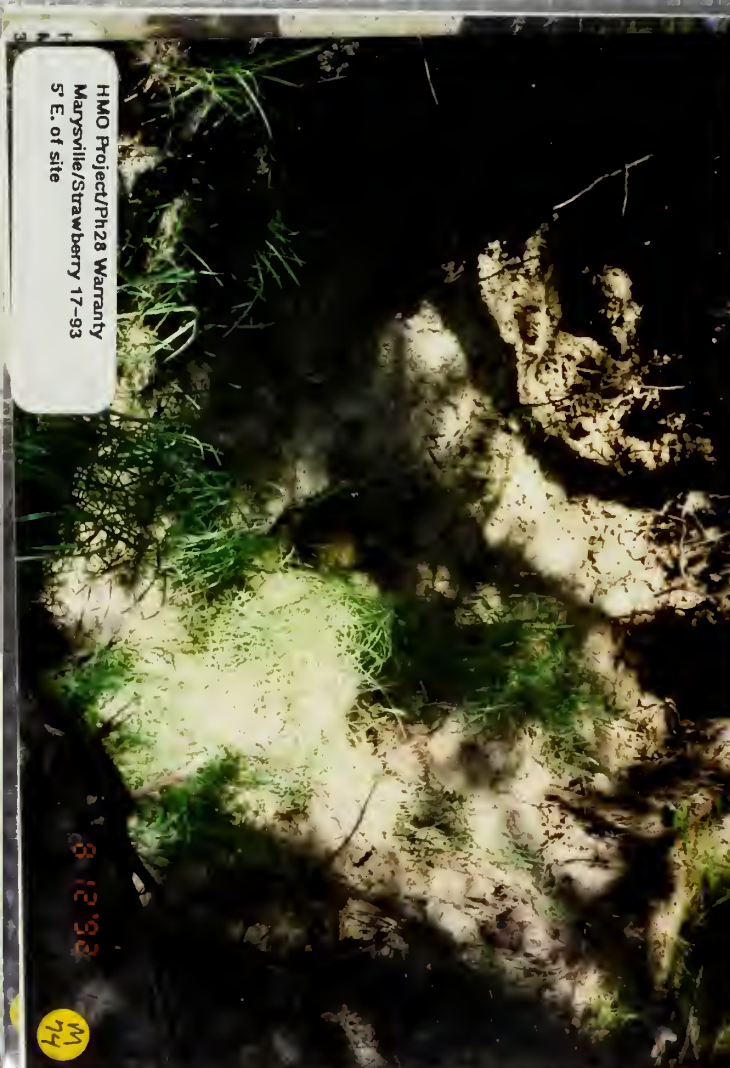
HMO Project/Ph28 Warranty  
Marysville/Snowbird 34-83  
30' E. of site



HMO Project/Ph28 Warranty  
Marysville/Strawberry 17-92  
25' E. of site

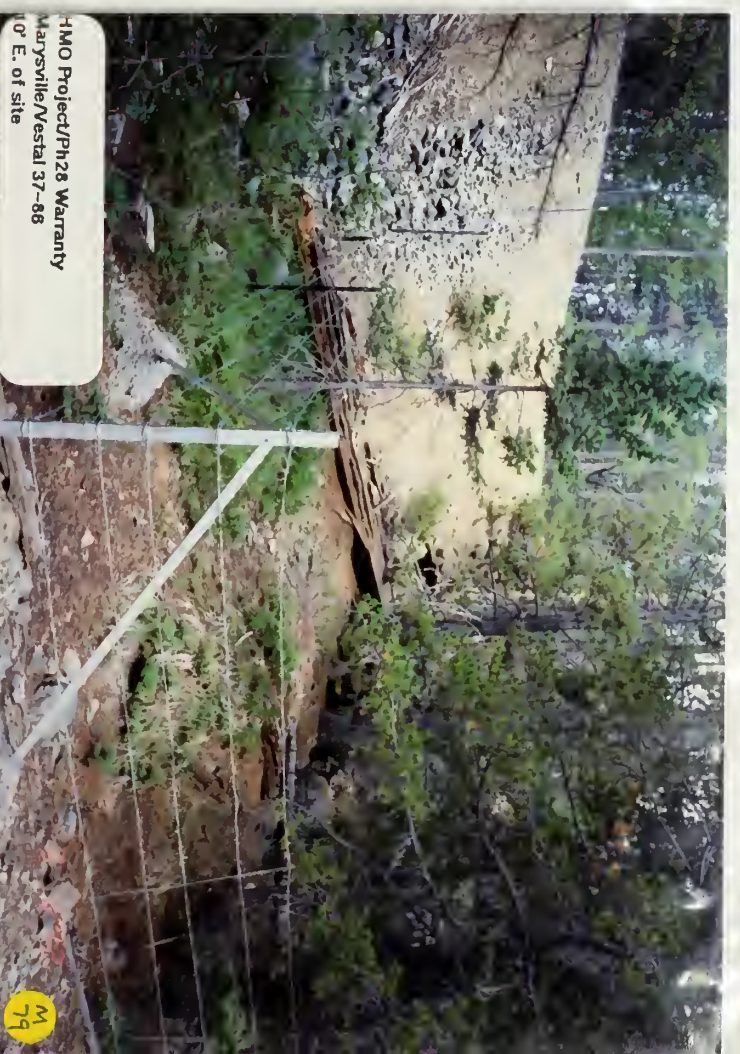
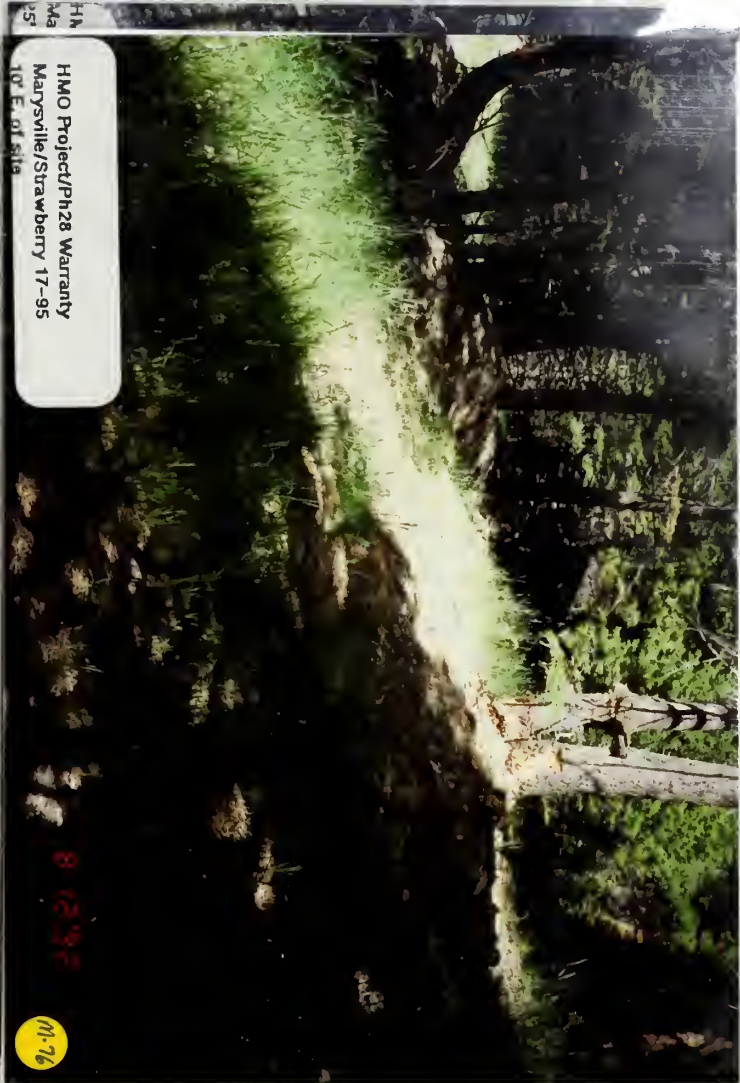


HMO Project/Ph28 Warranty  
Marysville/Strawberry 17-94  
15' E. of site



HMO Project/Ph28 Warranty  
Marysville/Strawberry 17-93  
5' E. of site





HMO Project/Ph28 Warranty  
Marysville/Strawberry 17-95  
10' E. of site

HMO Project/Ph28 Warranty  
Marysville/Vestal 37-88  
10' E. of site

HMO Project/Ph28 Warranty  
Marysville/Strawberry 17-99  
20' S. of site

HMO Project/Ph28 Warranty  
Marysville/Tyson 38-85  
100' S. of site



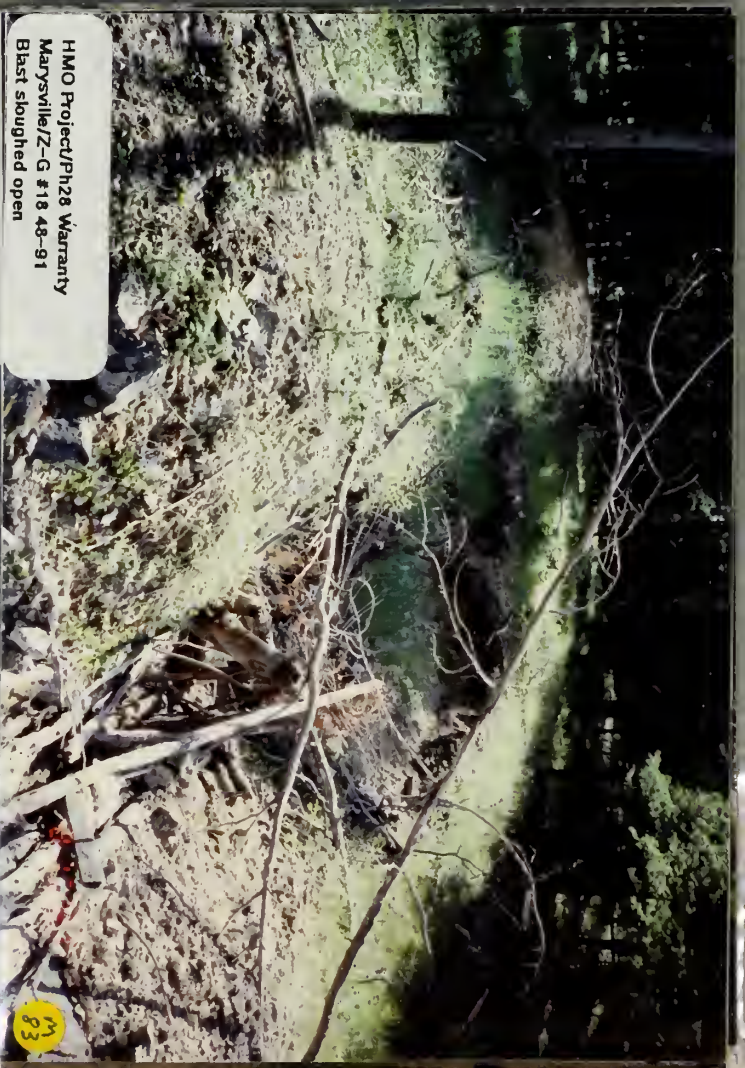


HMO Project/Ph28 Warranty  
Marysville/Whippervill 38-87,88  
Looking W, down fence line

**DANGER**  
**MINE OPENING**  
DO NOT ENTER  
PENALTY \$1000



HMO Project/Ph28 Warranty  
Marysville/Z-G #18 48-89  
10' W. of site



HMO Project/Ph28 Warranty  
Marysville/Z-G #18 48-91  
Blast sloughed open



HMO Project/Ph28 Warranty  
Marysville/Z-G #18 48-90  
10' N. of site





HMO Project/Ph28 Warranty  
Maysville/Z-G #18 48-67  
E. of site



